DECLARATION OF DARLENE ALT
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Alt Declaration

Exhibit 1

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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

DINA ANDREN, SIDNEY BLUDMAN, VIRGINIA CIOFFI, BERNARD FALK, JEANETTE KERZNER-GREEN, CAROL MONTALBANO, and DONALD RIGOT, individually, and on behalf of other members of the general public similarly situated,

Plaintiffs,

v.

ALERE INC., a Delaware corporation, ALERE HOME MONITORING, INC., a Delaware corporation, ALERE SAN DIEGO, INC., a Delaware corporation,,

Defendants.

Case No. 16-cv-01255-GPC-AGS

CLASS ACTION

DECLARATION OF RICHARD WHITE, M.D. IN SUPPORT OF DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION FOR CLASS CERTIFICATION

Date: September 22, 2017
Time: 1:30 p.m.
Place: Courtroom 2D
221 W. Broadway, Suite 2190
San Diego, California 92101
Judge: Hon. Gonzalo P. Curiel
Magistrate: Hon. Andrew G. Schopler
Action Filed: May 26, 2016 2017
Trial Date: None Set

DECLARATION OF RICHARD WHITE, M.D.

I, Richard White, declare as follows:

1. I know the following of my own personal knowledge, and if called to testify, could and would competently testify as follows.

2. I am a medical doctor, and Professor of Clinical Medicine, Emeritus (recalled 2014), at the UC Davis School of Medicine where I have served as Director of Anticoagulation Services at the UC Davis Medical Center since 1985, and as the Chief of the Division of General Medicine since 1998. I hold Board Certification in Internal Medicine (1976), Rheumatology-Immunology (1980), and Cardiology-ECG Exam (1996). I have been on faculty at U.C. Davis since 1980, and before that was on faculty in the Department of Medicine at the U.C. San Francisco. During my career, I have served as an investigator in many funded research projects. I have served as a reviewer on numerous academic journals, and am a member of many academic societies. I have authored nearly 200 journal articles, as well as numerous book chapters and other publications. A copy of my CV is attached as Exhibit A.

3. For the majority of my career, the principal focus of my clinical and research work has been on anticoagulation therapy, particularly in patients with venous thrombosis or atrial fibrillation. I created the outpatient anticoagulation clinic in 1988 and the inpatient anticoagulation service in 1995. I have built up a very large Anticoagulation Clinic (AC) that now follows 1800 patients on warfarin, and another 600 patients who take one of the newer oral anticoagulants. These patients live in the Sacramento Valley and nearby foothills and up into the Sierra Nevada Mountains. Some of my early research involved work with the original fingerstick monitor made by Biotrack®. At any given time, we have approximately 2500 patients under our care, making our clinic one of the largest of its kind in

California.

4. I have been asked by Sedgwick LLP, counsel for the Alere Defendants, to provide the Court with an overview of the medical context in which this legal action has arisen. Specifically, I have been asked to provide a short history of the use of warfarin as an anti-coagulant medication, discuss the role of laboratory monitoring in the management of warfarin therapy, describe the different strategies used to monitor warfarin therapy, discuss the advantages of different types of monitoring strategies, including the use of anticoagulants that do not require monitoring, and to explain the mathematical parameters used to measure the quality of anticoagulant care in patients who take warfarin. I have also been asked to comment on the INR readings provided by the class representatives.

It is my opinion that the INRatio®/INRatio®2 monitoring systems (collectively "INRatio®"), by objective criteria, provided value to patients who used it, and that, but for their use of INRatio®, patients would have spent money on a) monitoring using a different type of POC device; b) monitoring using standard laboratory based INR testing, with venipuncture samples; or c) would have been placed onto one of the newer anticoagulants that do not require INR testing (and which have higher monthly co-payment costs.) Based on what I know of the data relating to the performance of INRatio®, I believe it unlikely that these class representatives experienced discrepant results that were clinically significant, and that determining whether any specific class member experienced such as result would require, for each member, a very careful and comprehensive analysis of their medical care, including their daily warfarin dosing records, assessment of the consistency of their diet, their use of other medications, and review of the presence and severity of all coexisting medical conditions.

Warfarin Therapy, the First and Most Commonly Used Anticoagulant

5. In order to understand the medical issues that are central to this case, it

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is imperative that one understands how the drug warfarin works, how warfarin anticoagulation treatment is managed, and how the effect of warfarin is monitored.

The purpose/goal of warfarin therapy is to treat medical illness/morbidity caused by the development of a blood clot by stopping the growth of the blood clot and preventing the development of any new blood clot in patients who manifests an acute clotting problem, specifically patients with acute deep vein thrombosis (DVT), pulmonary embolism (PE) or acute stroke caused by embolism of a blood clot from the left-atrium of the heart in patients with atrial fibrillation (AF).

The term "anticoagulation" means 'thinning' of the blood, or more exactly, causing an increase in the amount of time it takes for blood to clot. When we anti-coagulate the blood, we want it to be more difficult (take longer) for the blood to clot in a test tube, and, in parallel, more difficult for a clot to form in the body. The logic is simple: if we make it more difficult for the blood to clot in a test-tube, the more difficult and less likely it will be for a blood clot to form in the body. However, the downside of anticoagulation with a drug like warfarin is that we make it more likely that a patient may bleed.

6. Warfarin is the most commonly used oral anticoagulant. The principal indications are: 1) treatment of an acute clot in a vein (acute deep vein thrombosis/DVT or pulmonary embolism/PE), 2) prevention of acute stroke in patients with the heart rhythm problem called atrial fibrillation (which can lead to blood clots in the left atrium), 3) prevention of a blood clot developing on a mechanical (metal) heart valve, and 4) prevention of acute DVT or PE in patients at high risk for forming a clot (surgical patients and, hospitalized medical patient, *etc*.) In each of these situations, physicians must balance the expected benefit of warfarin treatment with the risks of potential complications, particularly major bleeding in the GI tract and bleeding into the head.

7. Warfarin was first discovered in the early 1940s when researchers in Wisconsin sought to determine what caused a bleeding disorder in cows, called

"sweet clover disease". They discovered a substance in the sweet clover that the cows ate that caused the blood not to clot, and this turned out to be warfarin. In fact, the word warfarin was created to honor the work done by the Wisconsin Area Research Foundation (WARF).

A lot of basic research was subsequently done to determine how the substances in clover (= coumarin compounds, including warfarin) led to bleeding. This research showed that *warfarin inhibits the formation of four biologically active clotting factors in the blood* that are necessary for a clot to form. Warfarin does this by inhibiting the action of Vitamin K, which is necessary to make correctly formed and functional clotting factors. These four factors are labeled using Roman Numerals: Factors II, VII, IX and X. Warfarin specifically inhibits the action of an enzyme called *Vitamin K epoxide reductase*, (VKORC) which maintains a supply of active Vitamin K in the liver. VKORC is the target of the anticoagulant drug warfarin. If too much warfarin is given, the liver cannot make enough active clotting proteins and the animal (human, rat, cow, *etc*.) dies from spontaneous bleeding.

Giving a large amount of Vitamin K to a patient on warfarin reverses the effect of warfarin because it replenishes the vitamin which leads to the creation of normal functional clotting factors, which in turn restores the body's ability to form a blood clot.

To summarize: the effect of warfarin is to reduce the blood level of functionally active clotting Factors II, VII, IX and X, which makes it more difficult for blood to clot; conversely, giving Vitamin K to a patient on warfarin reverses the effect of the warfarin.

Evolution of Coagulation Monitoring

8. If we give too much warfarin to a patient, the patient may/will die of bleeding. Realizing this, researchers had to determine how much warfarin should be given to humans to impede the formation of blood clotting and yet not cause

bleeding/death. A test had to be developed that accurately measured the effect of warfarin based using a test to determine how long it takes for the blood to clot. A laboratory clotting test (*in-vitro, or in a test tube*) was developed called the *prothrombin time* (PT). Blood drawn from a vein is placed in a test tube that contains a substance that instantly prevents the blood from clotting by binding all of the calcium in the blood sample (Calcium is *required* for blood to clot). Later, a technician can add some calcium back to the blood sample, and then measure the time that it takes for the blood to clot. However, another factor has to be added to the test tube called a *thromboplastin*, to stimulate the blood clotting process.

Using the PT test, it normally takes about 12 seconds for blood to clot in healthy adults. Patients taking warfarin have a prolonged PT test result, and the blood takes ~30 or more seconds to clot. When the PT is at this value of ~30 seconds, blood clotting is slowed, and formation of clots is markedly reduced, without causing overt bleeding. However, if the PT goes to higher values (like 60 seconds), bleeding becomes more likely.

Unfortunately, there are many different pharmaceutical manufacturers of the *thromboplastin* used in the PT test, so the result of a PT test in one hospital may be different than a PT test done in a different hospital that uses a different *thromboplastin reagent*. A single patient who takes a constant daily dose of warfarin might have a PT measurement using one PT reagent of 20 seconds, and 40 seconds using another brand, and 70 seconds using a third reagent brand. Thus, *the results of the PT test are not standardized and are therefore not comparable*. An attempt to normalize the PT test did not occur until the late 1980s, and full normalization of the test did not occur until the early 1990s. What this means is that, historically, hospitals that used different PT test reagents got different PT test results, and the degree of warfarin anticoagulation varied widely between hospitals.

9. A new test was created in the early 1990s called the **International Normalized Ratio**, or INR. Mathematically, the results of PT testing using different

reagents could be made more comparable (= closer to giving the same result) using a mathematical correction factor, and this 'corrected PT test' was called the INR. As the name suggests, the test "normalized" the PT ratio. However, even today, when INR test results are compared from laboratories that use two different thromboplastin reagents, the results can still vary significantly.

10. Clinical studies in the late 1980's and early 1990's showed that blood clotting disorders (venous thrombosis, stroke from atrial fibrillation) are effectively prevented when the steady state INR value climbs to above a value of 1.8, whereas major bleeding does not becomes significantly more frequent until the INR is greater than 5.0. The INR target range for most clinical conditions is INR = 2.0-3.0 (for venous thrombosis or atrial fibrillation) or INR = 2.5-3.5 (mechanical heart mitral valves).

11. Achieving and then maintaining a stable INR value in the desired target INR range in a patient starting warfarin is not easy. The steady-state daily dose of warfarin needed to achieve an INR of 2.5 varies between patients from as low as 3 mg a week (1 mg taken Monday, Wednesday and Friday) to over 105 mg a week (= over 15 mg every day). This is largely because the enzymes in the liver that metabolize (destroy) warfarin vary dramatically between different individuals. One single daily dose of warfarin (e.g. 5 mg/day) is certainly not appropriate or safe in all patients. In addition, the amount of Vitamin K consumed daily by different people varies widely as well, and as noted above, Vitamin K acts to counteract the effect of warfarin. Thus, to achieve a steady INR, the patient has to be on the right dose of warfarin, take it every day, and have a constant intake in Vitamin K in their diet.

12. To understand how we monitor warfarin therapy using the INR we need to discuss a little more about warfarin pharmacology. It is important to understand the relationship between the average daily dose of warfarin and INR value. We start by reiterating that warfarin inhibits the formation of functional

(active) clotting factors. Patients who have functional clotting factor levels lowered to 50% of normal still have a normal or near normal INR value. (Gulati et al, Archives of Pathology and Laboratory Medicine. 2011;135:490–494) Clotting factor levels have to fall to below 30% of normal to effectively thin the blood. If the level of clotting factors falls to 10% of normal the INR rises exponentially as does the patient's risk of bleeding. The key point is that as the dose of warfarin increases (= as the level of clotting factors decrease), the INR rises *exponentially* (Dalere, GM et al. Pharmacotherapy 19 (4), 461-467. 1999). For example, if a patient achieves a steady-state INR value of 2.4 when taking 7.5 mg a day of warfarin (= 52.5 mg a week), when the warfarin dose is increased to 10 mg a day, the INR will increase to an INR value of 10 (or higher); if the dose is increased to 11 mg a day, the INR will become unmeasurable. A small change in the warfarin dose can have a huge effect on the INR. Another way of saying this is that there is little difference between someone with an INR value of 8, and someone with an INR value of > 15. Once an INR of value of 5.0 is reached, the INR can rise precipitously to very high values if either more warfarin is given or if the effect of warfarin increases (e.g. the liver fails or a drug that slows the metabolism of warfarin is given).

13. All patients on warfarin must be monitored because of the following: a) significant swings in the INR occur over time in many patients, and, b) if the INR falls below 1.8 there is an increase in the risk of thrombosis, and if the INR rises to above ~5.0 there is an increase in the risk of bleeding. There are only two methods for monitoring the INR, a standard laboratory INR blood test measured on a device called a coagulometer, and an INR measured using a fingerstick monitor (also known as a 'point of care' or POC device).

14. *Point of Care Devices* (POC) to measure the PT, and later the INR, were developed because of: a) the observed need to *frequently* monitor/test the INR at home in order to keep the INR in the therapeutic range, b) the absence, in some

patients, of any peripheral veins from which blood could be drawn to measure the INR, and c) the inability of some patients to get to a laboratory to have their INR blood sample drawn. The technology that enabled 'whole-blood' fingerstick INR monitoring will not be discussed here, but suffice to say that the test itself is very different than a normal laboratory PT/INR test. A laboratory INR test uses patient plasma (no red cells) whereas the fingerstick testing uses a drop of whole-blood (including red blood cells) placed in a well in a plastic cartridge or test strip. To generate a valid INR value, the clotting time observed using in the fingerstick POC device has to be internally adjusted (calibrated) and normalized to the INR values obtained using simultaneous performed laboratory INR testing. Even after standardizing the fingerstick INR value, the recorded POC INR test value may be somewhat different than the simultaneously drawn INR value (e.g. POC INR= 2.8, Lab INR =2.4). However, one has to remember that if two simultaneous laboratory INR tests (using different reagent and different testing equipment) using the *same blood sample* are compared, there may also be a difference observed in the INR values (e.g. Lab 1= 2.2, Lab 2= 2.5). There would be, on average, an even *larger* difference between two different laboratory INR values if the samples tested were obtained using two different venipuncture samples drawn from two different veins one minute apart (e.g. INR 1= 2.5, INR 2= 2.9). *Thus, the INR measurement is inherently imprecise*, and subject to greater variation compared to most blood tests, such as the measurement of serum Hemoglobin, serum Calcium, or serum Sodium.

The physicians and pharmacists who manage patients on warfarin are very aware of the fact that one source of variation in a patient's INR is variation in the INR test itself. We had a patient recently who had an INR done at a local hospital in Sacramento and the value was 5.1. We called the patient and had a repeat INR done at UC Davis, and it was 3.2 one hour later.

15. The clinical considerations that go into making a decision about whether a patient is an optimal candidate for home fingerstick monitoring have been

mentioned already (need for frequent monitoring, poor venous access, no local laboratory, bedbound, no transportation, etc.) Additional considerations include : need for chronic warfarin therapy (not just a short 3 month treatment period), the ability (dexterity) to actually perform the fingerstick test (observed by our staff), the intelligence of the patient (or his/her family members), the presence of a phone, adherence to warfarin dosing, and meeting other Medicare guidelines for receiving a POC INR monitor. At UC Davis, the pharmacists who run the AC clinic are the health personnel who make the decision regarding the appropriateness of the use of home INR monitoring. The pharmacists assess the patient's ability to use the fingerstick devices, and the medical director (Dr. White) writes the prescription for the device after discussion with the staff.

Managing Warfarin Therapy

16. The target INR for each warfarin patient is not a single INR value but rather a range of INR values. For example, in a patient with a venous thrombosis, the target range for treatment is INR= 2.0-3.0 for 3-6 months. This INR range was established by large clinical studies that looked at the outcomes of *recurrent venous thrombosis* and *bleeding*. Recurrent venous thrombosis becomes more frequent if INR values fall below a value of 1.8 for a protracted periods of time (days to weeks), and bleeding becomes more frequent if the INR values over a protracted period of time rise to a value greater than 5.0. The target range of INR = 2.0-3.0 has been the standard of practice for over 20 years.

There is voluminous data showing that in patients managed in a large AC clinic, the best that can be expected is that, on average, patients targeted for an INR range of 2.0-3.0 will have an INR between the values of 1.8-3.3 for 70% of the time. This value is called the TTR which stands for Time in the Therapeutic Range. The TTR is calculated using a slightly wider and more liberal INR range of 1.8-3.3 because the target range is 2.0-3.0, and there is inherent variability in the INR

measurement. (A patient does not suddenly clot when the INR falls from a value of 2.0 down to a value of 1.9). To my knowledge, no large clinic has ever reported that a large clinic population has achieved a TTR above a value of approximately 75%. The calculation of the amount of time the INR is in the target range involves making some assumptions [if one month I have an INR of 2.5, the next month the INR is 3.7 and a week later, after a dose change, it is 3.0; the TTR calculation assumes half of the time between the first INR (=2.5) and the next INR (=3.7) the INR was therapeutic and half the time it was out of the therapeutic range]. This methodology, called the *Rosendaal method*, is universally applied by all clinics that monitor the TTR as a quality measure.

For patients with a newer "bi-leaflet" mechanical heart valve in the mitral position (mitral value prosthetic valve) have a slightly higher INR target range of 2.5-3.5. This is based on clinical studies that suggest a higher incidence of valve thrombosis if the INR falls below 2.5 for a protracted period of time. For bi-leaflet aortic valves, the target ranges is INR 2.0-3.0. For patients who have an older ball-valve or tilt-disc type of mechanical heart valve, the target range is 2.5-3.5.

In patients with atrial fibrillation (AF), the target range is INR= 2.0-3.0. Again, this range has been established based on large clinical trials and studies that have shown that the stroke rate falls significantly when the INR is in the therapeutic range. Patients with AF can have a stroke when the INR is therapeutic. This is because not all strokes are due to a blood clot breaking off and going to the brain from the heart. Some strokes are due to occlusion of a small artery in the brain that has atherosclerotic plaque (similar to the cause of a heart attack in patients with coronary artery atherosclerosis). A hemorrhagic stroke can occur when the INR is therapeutic as well.

17. We have discussed two of the principal reasons the INR value varies in a patient who takes a steady daily dose of warfarin: variation in the INR measurement, and variation in the patient's intake of Vitamin K. Other causes of

INR variation include: patient adherence (missing a dose or taking the wrong dose of warfarin), drug interactions that increase or decrease the warfarin drug level in the blood, liver disease (decreased clotting factor synthesis in a patient with, for example, acute hepatitis), onset of a significant medical illness (the serum albumin levels fall and the amount of free-warfarin in the blood stream goes up), changes in the manufacturer of the warfarin (when a patient changes the generic brand of warfarin they use, we often see a change in their INR).

18. Bleeding occurs in a patient who takes warfarin for two reasons: either the patient develops some kind of pathology that is associated with bleeding (for example he/she develops a duodenal ulcer) or the patient oozes from some bleeding site simply because they are on an anticoagulant. For example, some elderly patients bleed in their brain when they are on warfarin, even in the absence of any history of a fall or sustaining head trauma. The majority of these bleeding episodes occur when the INR is in the therapeutic range. However, the odds that a bleed may occur do go up as the steady-state INR value rises. In the AC, clinic 70 percent of all bleeding episodes that occur in our patients develop when the INR between 2.0 - 3.0. Some of the bleeds occur even when the patient has a sub-therapeutic INR. However, 25% of the bleeds occur in the 15% of patients who have a high INR. Thus, the rate/chance of active bleeding is higher as the steady-state INR value rises. Some of the bleeding events are spontaneous, but many are associated with minor trauma, such as a fall, or bumping the head on a doorway. In patients with Atrial Fibrillation, most strokes occur when the INR falls below 1.8.

Performance of POC monitors and Alternatives to INRatio®

19. The goal of monitoring the INR is to maximize the likelihood that the patient's INR is maintained in the therapeutic range. By monitoring the INR, we maximize the likelihood of benefit (no thrombosis) and at the same time minimize the risk of bleeding. We monitor patients more closely when their INR values vary

over time precisely because we do not want the INR to stay below a value of 1.8 for more than few days, and we do not want the INR above a value of ~4.0 for more than a few days. If a specific patient has a steady INR value on a steady dose of warfarin, we gradually increase the time interval between measurements, and this time period may be a wide as every 4-5 weeks, but no greater than this. One patient we followed in the AC clinic had a therapeutic INR that was always between 2.0-3.0 for over *7 years* while he took a daily dose of 5.0 mg of warfarin each day. This is the exception, however, not the rule. Many patients have to be tested every two weeks or even more frequently.

20. In 1989 we published the first randomized study that evaluated the feasibility of performing home PT monitoring [White *et al*, Ann Int Med 1989;111:730-737]; we reported that the accuracy of control was significantly higher (93% of INR tests were in the target range) in patients who were able to use a home fingerstick device (Biotrack® PT monitor) and who performed the test at home over a two-month period, compared to patients who could use the monitor but who instead were followed in our AC clinic (75% of the INR values were in the target range). The home-monitored patients performed testing approximately twice as often as the patients randomized to AC clinic care. There were no complications in either group in this short study.

Since this initial paper, there have been many studies that have evaluated the benefits of self-testing using a POC INR monitor. One major and important study by Bloomfield et al, Ann Intern Med. 2011 Apr 5; 154(7):472-82.did a meta-analysis of 22 clinical trials that include 8413 subject who performed *patient self-testing* (with dosing changes made by the AC clinic staff) or *patient-self management* (dosing decisions made by the patient, based on information supplied to them) of their INR using a fingerstick INR monitor. [These summary-analyses of multiple studies are called "meta-analyses"]. These researchers reported that *patient self-testing* was associated with a statistically significant 26% reduction in the risk

of dying; a statistically significant 42% reduction in the risk of having a thrombosis, and statistically non-significant 11% reduction in the risk of hemorrhage. The POC INR monitors used included the CoaguCheck® XS System (Roche), the ProTime® Microcoagulation System (ITC Medical) and INRatio® (HemoSense/Alere). It should be stressed that in all of the randomized studies, the patients included in the studies had to first demonstrate the ability to use the monitors correctly to get into the study. The findings do not apply to patients who are not capable or responsible enough to perform and use a home INR monitor.

21. Dutch researchers recently published the results of a randomized study of home-monitoring using either the CoaguCheck® XS or the INRatio®2 monitor in patients who were eligible for home testing in their National Thrombosis Service.[Brouwer et al, Advances in Therapy (2014) 31:639–656]. The drug they used was not warfarin but was the closely related drug acenocoumarol. The mechanism of action of this drug is the same as warfarin, however, it has a shorter half-life than warfarin. Overall, there were 4326 patients randomized to one of the two monitors and the study lasted for 1.5 years. Patient time in the therapeutic range (TTR) using each monitor was similar, with a very high TTR value for both monitors: 88.5% of the time for the CoaguChek®XS and 87.4% of the time for INRatio®2 (no statistical difference). There were 71 deaths, 40 in the CoaguChek group and 31 in the INRatio2 group (not statistically different). The number of critical events (INR < 1.5 or INR > 5.0) was not statistically significantly different (P= 0.97) between the two monitors; these events occurred on average in 2.8% of the INR measurements per month. The authors concluded that there was no clinically relevant effect of the choice of coagulation monitor on the TTR, minor or fatal outcomes during long-term anticoagulation management.

22. While others may speak to the data supporting the accuracy and precision of INRatio®, these clinical studies I just referred to support the position that use of INRatio® has been an effective tool in warfarin management. In an

individual patient, a physician assessing the effectiveness of warfarin management using INRatio® would have to take into account the many individual variables that affect the INR, the presence of other medical conditions (like liver disease, heart failure), dietary variation in vitamin K intake, adherence to the prescribed dose of warfarin, consumption of other medications that can affect warfarin levels, and other factors that can affect in the stability of INR readings.

23. I have been provided with records reflecting serial INR measurements over time using the INRatio® device for the Plaintiffs in this case. Overall, their results appear to be typical compared to what we see in our coagulation clinic patients (both those monitored using a laboratory measured INR and those monitored using a point-of-care device). Many different factors can cause an INR to go up or down, and the fact that a patient may be transiently out of the INR target range, or having trouble getting their INR to stabilized, does not mean that their INR results are not accurate. Based on what I understand of the performance characteristics of INRatio®, before reaching a conclusion that a specific patient's POC monitor yielded an incorrect INR result that was clinically significant I would need to know: 1) the prescribed daily warfarin dose corresponding to each of the INR values that was measured using INRatio® 2) a list of all the medications the patient was taking concomitantly with the warfarin, 3) the patient's blood hematocrit and/or hemoglobin values measured during the time that they were on warfarin therapy, 4) a list of each patient's ongoing chronic medical problems (*e.g.*, heart failure, diabetes, chronic liver disease), 5) the patient's health care provider's assessment regarding the constancy of their dietary intake of vitamin K containing foods, and 6) the name of the medical condition for which the patient was being treated with warfarin.

23. From 2009 to 2016, the alternatives for INR monitoring included: 1) self-testing or self-management using the CoaguChek® XS, the INRatio®2, or the ProTime® monitor, 2) anticoagulation clinic care (AC clinic), 3) management by an

office staff, 4) management by a single nurse or physician, or 5) cessation of warfarin with the substitution of one of the newer anticoagulants (a fixed dose of: rivaroxaban, apixaban, edoxaban or dabigatran, which require no INR monitoring at all). The best alternative depends on the circumstances of individual patients. But, for patients on warfarin, no monitoring is not an option.

DATED: July 25, 2017



Richard White

Alt Declaration

Exhibit 2

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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

DINA ANDREN, SIDNEY BLUDMAN, VIRGINIA CIOFFI, BERNARD FALK, JEANETTE KERZNER-GREEN, CAROL MONTALBANO, and DONALD RIGOT, individually, and on behalf of other members of the general public similarly situated,

Plaintiffs,

v.

ALERE INC., a Delaware corporation, ALERE HOME MONITORING, INC., a Delaware corporation, ALERE SAN DIEGO, INC., a Delaware corporation,

Defendants.

Case No. 16-cv-01255-GPC-AGS

CLASS ACTION

DECLARATION OF BENJAMIN WILLIAM DOUGLAS SCHER

Date: September 22, 2017
Time: 1:30 PM
Place: 221 W. Broadway, Suite 5160
San Diego, California 92101

Judge: Hon. Gonzalo P. Curiel
Magistrate: Hon. Andrew G. Schopler
Action Filed: May 26, 2016
Trial Date: None Set

I, Benjamin William Douglas Scher, declare as follows:

I. INTRODUCTION

A. Qualifications

1. I am a Partner at Bates White, LLC (Bates White), a professional services firm that conducts economic, statistical, and data analyses in a variety of industries and forums.

2. I received my BS in Policy Analysis and Management from Cornell University in 2002. I have spent the last approximately 15 years at Bates White performing data analysis and economic analysis in a variety of contexts. Over the course of my career I have worked on more than 50 engagements. The majority of my work has focused on the healthcare and life sciences sectors. I have been retained as lead consulting expert for drug manufacturers, medical device and diagnostics manufacturers, and healthcare providers on numerous engagements. I have also served as a testifying expert.

3. The common thread across my work is the review, processing, analysis, and presentation of information gleaned from large data sets and the estimation of economic damages. I have analyzed more than 1,000 claims, sales, and other healthcare-related data sets over the years. I frequently present my analyses of data and potential economic damages to companies' outside counsel, in-house counsel, and senior executives. I also frequently present analyses to government attorneys and investigators. My data analyses and economic damage calculations have been accepted on many occasions as the basis for settlements between the government and pharmaceutical companies, medical device manufacturers, and healthcare providers. Additionally, I have supported and assisted other testifying experts with their data and economic analyses in numerous litigation matters. Finally, certain of my data and economic analyses have been published in the *International Journal of the Economics of Business* and *Pharmaceutical Executive*.

4. A copy of my curriculum vita is attached as Appendix A. None of

Bates White's compensation is contingent upon the outcome of this litigation.

B. Summary of Allegations and Mr. Andrien's Opinions

5. According to the First Amended Complaint:

> This action is brought on behalf of Plaintiffs and a class of consumers who purchased "INRatio PT/INR Monitors," "INRatio PT/INR Test Strips," "INRatio2 PT/INR Monitors" and "INRatio2 PT/INR Test Strips" (collectively, the "INRatio Products"). Plaintiffs' claims concern the unlawful, deceptive and misleading practices conducted by Defendants in connection with the manufacturing, marketing and sales of the INRatio Products in violation of California law and the common law.[1]

6. More specifically, the First Amended Complaint alleges that the INRatio® products "effectively did not monitor anything," were "worthless," and that:[2]

> Defendants withheld material information from the public and continued selling the INRatio Products unabated, marketing and advertising them as an INR monitor, which was "accurate," "convenient," "effective," "reliable," "optimal," and "safe."[3]

7. The First Amended Complaint seeks to certify a class consisting of:

> All residents of the United States of America [or specific state sub-classes] who, during the period January 1, 2009 through the present, purchased, rented or otherwise paid for the use of the INRatio Products

[1] First Amended Complaint, Oct. 3, 2016, p. 2. [hereinafter First Amended Complaint]

[2] Expert Report of Jeffrey S. Andrien, June 21, 2017, pp. 10-11. [hereinafter Andrien Report]. First Amended Complaint, pp. 11, 15.

[3] First Amended Complaint, p. 2.

manufactured, marketed, sold or distributed by Defendants[4]

8. On June 21, 2017, Mr. Jeffrey Andrien submitted an expert report on behalf of the plaintiffs and putative class members. Mr. Andrien concludes that putative class members that "purchase[d] the products received no intrinsic value because the product was not able to perform its function of providing accurate and reliable results for anticoagulant management."[5] He also concludes that "the INRatio Products harmed patients, providing them with negative value, and thus, no reasonable consumer would have purchased the defective INRatio Products had they known the truth."[6] On the basis of these conclusions, Mr. Andrien asserts that "damages can be measured as the price paid by consumers for the INRatio products."[7] In other words, Mr. Andrien states that putative class members are entitled to a "full refund" of their payments.[8] Mr. Andrien's methodology estimates purported damages by combining Alere Home Monitoring's (AHM) "revenues generated from end-users of INRatio Products of $113.6 million" with an "estimate of ASD's [Alere San Diego] sales of INRatio Products that were ultimately sold to consumers of $43.5 million" for a total damages estimate of $157.1 million.[9]

C. Scope of Charge and Materials Considered

9. Counsel for Alere, Inc. (Alere) have asked that I evaluate the opinions expressed by Mr. Andrien, and assess whether his proposed measure of damages, and the bases for his opinion, rest on sound economic methodology and match the

---

[4] First Amended Complaint, pp. 32-34. Plaintiffs also seek to certify the following sub-classes: California Sub-Class, Colorado Sub-Class, Florida Sub-Class, Georgia Sub-Class, Maryland Sub-Class, New York Sub-Class, and Pennsylvania Sub-Class.

[5] Andrien Report, p. 13.

[6] Andrien Report, p. 13.

[7] Andrien Report, p. 14.

[8] Andrien Report, P. 14.

[9] Andrien Report, p. 6.

evidence in this case. In reaching my opinions in this matter, I relied upon the list of materials in Appendix B.

10. I reserve the right to update my opinions if new materials become available during the course of this litigation.

II. SUMMARY OF OPINIONS

11. At a high level, I conclude that Mr. Andrien has not performed the type of empirical or scientific analyses necessary to support his conclusions. In contrast, my analyses of the available data and information illustrate that Mr. Andrien's key conclusions are unfounded and at odds with demonstrable fact. Mr. Andrien also commits errors that cause him to overstate the amount of any purported damage, even under his flawed framework. I also conclude that a robust analysis of whether and to what extent any given putative class member incurred economic damage due to the purported conduct entails an analysis of the "but-for" world, which Mr. Andrien has not undertaken. Finally, I conclude that accurately assessing economic damages would give rise to individualized issues among putative class members, and the vast majority of putative class members likely did not incur any economic damage as a result of the purported conduct.

12. With respect to Mr. Andrien's assertion that the INRatio® products conferred "no intrinsic value" and were not able to perform the "function of providing accurate and reliable results for anticoagulant management," I conclude as follows:

- Mr. Andrien's conclusion does not rely on any empirical data or studies.
- In contrast, I have reviewed empirical data regarding the performance of the INRatio® devices. These data are clear: in the vast majority of cases the INRatio® products did provide accurate INR readings.
- Mr. Andrien commits the fundamental mistake he indicates

should be avoided: he assigns a full refund even in instances in which putative class members received value in the form of accurate readings, effectively creating the economic "windfall" that he warns against.

- Moreover, identifying whether and to what extent any individual putative class member had discrepant readings using the INRatio® and/or had clinical complications as a result would involve an individualized patient-by-patient inquiry.

13. With respect to Mr. Andrien's assertion that "no reasonable consumer would have purchased the defective INRatio Products had they known the truth," I conclude as follows:

- An analysis of whether patients would use INRatio® necessitates an examination of how these devices reach patients, especially:
  - A focus on physicians who prescribe home monitoring, have experience with different devices, have technical information about their use and performance, and also understand the alternatives to home monitoring.
  - Consideration and analysis of the factors physicians take into account when choosing among devices to recommend to patients (e.g., ease of use, amount of blood required, product packaging, prior experience, manufacturer responsiveness to questions), and how any purported additional information about the accuracy of the INRatio® products would affect these choices.
- Mr. Andrien has not considered any of these factors, which give rise to individualized physician-by-physician and patient-by-patient considerations.

14. With respect to Mr. Andrien's actual computation of damages, I find

that he commits two errors:

- First, his calculations include payments made by putative class members and their insurers. He has not, however, explained the basis on which putative class members can pursue claims on behalf of third-party payors, and he has assumed that all putative class members have the legal ability to do so.
- Second, his calculations treat all payments as if they were for the products at issue, but for most patients, AHM provides a bundled service and does not sell monitors and strips. The service *includes* providing testing materials (monitor and strips), and also includes training and a reporting system for sharing patients' test results with their physicians. This further causes an overstatement of the amounts putative class members paid for the products at issue.

15. I also conclude that Mr. Andrien has not considered several other factors that are critical for assessing whether and to what extent putative class members incurred economic harm. In particular, my understanding is that all of the putative class members need some form of INR monitoring. Unlike some consumer goods (e.g., a new television), simply foregoing "a purchase" is not an option. As a result, an analysis of potential economic harm entails an assessment of each putative class member's economic situation in the actual world compared to a "but-for" world in which they still monitor their INR. This raises two important considerations:

- All putative class members would have made payments for INR monitoring even if they used a different brand of device or underwent lab testing. In fact, for patients on Medicare and many insurance plans, reimbursement for home INR monitoring services is set at a fixed level regardless of the brand of device used. This observation, in conjunction with empirical evidence

that the vast majority of INRatio® readings were accurate, illustrates that putative class members could not have been harmed economically in most instances: they had accurate readings and paid a fixed amount.

- Because Mr. Andrien computes damages as the full amount paid by every putative class member in connection with the INRatio® products, he is implicitly comparing the performance of the INRatio® to a standard of perfection, not to an empirically based benchmark. While I am not a doctor or clinician, evidence regarding benchmarks makes clear that this assumption of perfection is unrealistic, and therefore Mr. Andrien's assessment of the economic impact on putative class members is inaccurate.

16. The remainder of this report proceeds as follows:

- Section III discusses relevant background.
- Section IV addresses the accuracy of the INRatio® products.
- Section V addresses Mr. Andrien's assertion that "no reasonable consumer" would have used the INRatio® products.
- Section VI addresses Mr. Andrien's damages computations.
- Section VII discusses relevant factors associated with the "but-for" world that Mr. Andrien has not considered.
- Section VIII concludes.

III. BACKGROUND

17. In this section, I provide background information as context for my analyses and opinions.

A. Benefits of Home Testing Using a POC Device

18. There are multiple options for INR testing, including anticoagulation clinics, hospital laboratories, commercial laboratories, physician offices, patient

home testing, and visiting nurses.[10] These options have different risks and benefits. Matchar *et al.* (2010) noted the benefits of home monitoring:

> High-quality management, such as that provided by anticoagulation clinics, can be an effective way to improve care but may require that patients travel to a centralized location, limiting the frequency of testing and in some cases access to anticoagulation management. Frequent home monitoring of the international normalized ratio (INR) by means of weekly self-testing is a promising strategy for improving outcomes…[11]

19. Similarly, the Centers of Medicare & Medicaid Services (CMS) released a "Decision Memo for Prothrombin Time (INR) Monitor for Home Anticoagulation Management" that stated:

> The studies reviewed demonstrated that home prothrombin monitoring significantly improve time in therapeutic range for select groups of patients, compared to testing done in physician offices, or anticoagulation clinics. Increased TTR leads to improved clinical outcomes, with reductions in thromboembolic and hemorrhagic

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[10] FDA Public Workshop, "Point of Care PT/INR Devices for Monitoring Warfarin Therapy," p. 60, *available at* https://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM491546.pdf.

[11] *See*, e.g., Hanna E. Bloomfield *et al*., *Meta-analysis: Effect of Patient Self-testing and Self-management of Long-Term Anticoagulation on Major Clinical Outcomes* (Annals of Internal Medicine, 2011). Joseph Garcia-Alamino *et al*., *Self-monitoring and Self-management of oral anticoagulation* (Cochrane Database of Systematic Reviews, 2010). Carl Heneghan *et al.*, *Self-monitoring of oral anticoagulation: systematic review and meta-analysis of individual patient data* (Lancet, 2012). David Matchar *et al. Effect of Home Testing of International Normalized Ratio on Clinical Events* (New England Journal of Medicine, 2010). David Matchar *et al., The impact of frequency of patient self-testing of prothrombin time on time in target range within VA Cooperative Study #481: The Home INR Study (THINRS), a randomized, controlled trial* (Journal of Thrombosis and Thrombolysis, 2015).

events.[12]

B. The INRatio® Devices and Alere

20. The INRatio® products include several monitors and test strips. In particular, on October 24, 2002, the FDA approved HemoSense, Inc.'s "INRatio Self-Test" device.[13] On October 26, 2007, the FDA approved HemoSense, Inc.'s "INRatio 2 PT Monitoring System."[14] HemoSense, Inc. was acquired by Inverness Medical Innovations, Inc. in August 2007.[15] On June 11, 2010, the FDA approved "INRatio/INRatio2 Test Strips," marketed by Biosite Incorporated, an Inverness Medical Innovations, Inc. Company.[16] In July 2010, Inverness Medical Innovations, Inc. changed its name to Alere, Inc.[17] On May 1, 2012, the FDA approved Alere, Inc's "INRatio2 PT/INR Monitoring System."[18] Throughout this report, my references to "INRatio®" encompass all of these products that were used during the putative class period unless otherwise specified.

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[12] CMS, "Decision Memo for Prothrombin Time (INR) Monitor for Home Anticoagulation Management," accessed July 6, 2017, https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=72.

[13] FDA, 510(k) Premarket Notification, accessed on July 6, 2017, https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K021923.

[14] FDA, 510(k) Premarket Notification, accessed on July 6, 2017, https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K072727.

[15] SEC Edgar Archives data, Press Release, "Inverness Medical Innovations to Acquire Hemosense, Inc.," accessed on July 6, 2017, https://www.sec.gov/Archives/edgar/data/1127393/000119312507173736/dex991.htm.

[16] FDA, 510(k) Premarket Notification, *available at* https://www.accessdata.fda.gov/cdrh_docs/pdf9/K092987.pdf.

[17] PR Newswire, News Release, accessed on July 6, 2017, http://www.prnewswire.com/news-releases/inverness-medical-innovations-changes-name-to-alere-98538494.html.

[18] FDA 510(k) Premarket Notification, *available at* https://www.accessdata.fda.gov/cdrh_docs/reviews/K110212.pdf.

21. AHM is a subsidiary of Alere, Inc.[19] AHM is enrolled with Medicare as an independent diagnostic testing facility (IDTF) and provides equipment used for patient self-testing for INR. Customers need a physician prescription to use AHM's services.[20] All patients are trained prior to self-testing through either AHM, other organizations, or physicians.[21] During the relevant time period, AHM distributed multiple devices to patients including the ProTime®, INRatio®2, and CoaguChek® depending on physician preferences and inventory stock.[22] Physicians refer patients to AHM in a process described by AHM's Vice President of Regulatory Affairs and Compliance, Sallie Kennedy:

> A. They -- a physician has a patient that he feels is suitable for patient self-testing at home. They need more testing than monthly and they are competent to perform that testing and report their results. So they would refer that patient to us. And we would teach the patient how to

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[19] 2017 Alere 10-k filing, Exhibit 21.1. SEC Edgar Archives data, *available at* http://otp.investis.com/clients/us/alere/SEC/sec-show.aspx?FilingId=12111258&Cik=0001145460&Type=PDF&hasPdf=1.

[20] Kennedy Dep. at 19:19–22. "Q. Is it possible for a customer to utilize the services of AHM without coming through a physician or clinic? A. No. It's a prescription item."

[21] Kennedy Dep. at 22:8–10. "A. We do not train all patients. Some patients have been trained by other organizations or they've been trained by their physician."

[22] Kennedy Dep. at 52:13–22. "A. We had ProTime which is no longer on the market. And the strips – the strips might have been different from time to time – they might have been a different product name or product – they might have had a different packaging or a different – depended on what they sent us. But the ProTime was a meter. And we carried their strips. We had INR. And then the INRatio2. And strips that were – went with them. And then we have Roche, the CoaguChek," Kennedy Dep. at p. 53:16–18. "In other words, we would – we would – we gave them, the physicians, the options to pick one of the meters." Kennedy Dep. at 65:19–24. "If the physician doesn't care what meter it is, then – or the clinic doesn't care, usually clinics will care – but the physicians – independent physicians that are sending us a referral don't care and then we would just provide the patient one of the meters that was in stock."

use the piece of equipment and do the test and provide a collection for that vis-a-vis an app on your phone, a website, an IVR or a technician that you could speak to.[23]

22. Alere San Diego, Inc. (ASD) is a subsidiary of Alere.[24] ASD manufacturers the INRatio® products. ASD sells products to distributors, which include IDTF's such as AHM.[25] ASD does not sell to end-users.[26]

C. Medicare Reimbursement for Home PT/INR Monitoring

23. The Healthcare Common Procedure Coding System (HCPCS) is a standardized coding system used by Medicare and other health insurers to ensure that claims are processed consistently.[27] The HCPCS Level II coding system is used primarily for medical items or services that are used outside a physician's office.[28] Medicare and other payors reimburse services related to home INR monitoring under three different Level II HCPCS codes:

- G0248: "Demonstration, prior to initial use, of home INR

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[23] Kennedy Dep. at 18:12–21.

[24] 2017 Alere 10-k filing, Exhibit 21.1. SEC Edgar Archives data, *available at* http://otp.investis.com/clients/us/alere/SEC/sec- show.aspx?FilingId= 12111258&Cik=0001145460&Type=PDF&hasPdf=1.

[25] Blundell Dep. at 33:23–34:9. "A So, because we sell through distribution, our distribution partners will not allow us to have their customer lists…We don't see it. We're not allowed to see it. It's confidential. So we only -- we don't see any end user anything. We only deal with distribution." Blundell Dep. at 45:12–13. "A The IDTF is the -- So AHM is considered the IDTF." Blundell Dep. at 48:11. "…We have the distributor or IDTF listed."

[26] Blundell Dep. at 16-20. "So our sales force works with distributors. We never do direct sales. So the Alere sales force may work with a physician's office, but for the physician to get the product, they've got to go through the distributor."

[27] CMS HCPCS – General Information, accessed July 6, 2017 https://www.cms.gov /Medicare/Coding/MedHCPCSGenInfo/index.html.

[28] CMS HCPCS – General Information, accessed July 6, 2017 https://www.cms.gov /Medicare/Coding/MedHCPCSGenInfo/index.html.

monitoring for patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets Medicare coverage criteria, under the direction of a physician; includes: face-to-face demonstration of use and care of the INR monitor, obtaining at least one blood sample, provision of instructions for reporting home INR test results, and documentation of patient ability to perform testing prior to its use"

- G0249: "Provision of test materials and equipment for home INR monitoring of patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets Medicare coverage criteria; includes provision of materials for use in the home and reporting of test results to physician; testing not occurring more frequently than once a week"
- G0250: "Physician review, interpretation, and patient management of home INR testing for a patient with either mechanical heart valve(s), chronic atrial fibrillation, or venous thromboembolism who meets Medicare coverage criteria; includes face-to-face verification by the physician that the patient uses the device in the context of the management of the anticoagulation therapy following initiation of the home INR monitoring; not occurring more frequently than once a week"[29]

24. Medicare first issued a National Coverage Determination (NCD) relating to home INR monitoring in 2002 for patients with mechanical heart

[29] Test materials include four tests. Centers for Medicare & Medicaid System, "Pub 100-04 Medicare Claims Processing," *available at* https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R1562CP.pdf.

valves.[30] Medicare issued a broader NCD in August 2008:

> "For services furnished on or after March 19, 2008, Medicare will cover for the use of home PT/INR monitoring for chronic, oral anticoagulation management for patients with mechanical heart valves, chronic atrial fibrillation, or venous thromboembolism (inclusive of deep venous thrombosis and pulmonary embolism) on warfarin. The monitor and the home testing must be prescribed by a treating physician as provided at 42 CFR 410.32(a), and all of the following requirements must be met:
>
> (1) The patient must have been anticoagulated for at least 3 months prior to use of the home INR device; and,
>
> (2) The patient must undergo a face-to-face educational program on anticoagulation management and must have demonstrated the correct use of the device prior to its use in the home; and,
>
> (3) The patient continues to correctly use the device in the context of the management of the anticoagulation therapy following the initiation of home monitoring; and,
>
> (4) Self-testing with the device should not occur more frequently than once a week."[31]

IV. THE INRATIO® PRODUCTS PROVIDED VALUE TO PUTATIVE CLASS MEMBERS, CONTRARY TO MR. ANDRIEN'S ASSERTIONS

25. Mr. Andrien asserts that each and every putative class member received

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[30] CMS National Coverage Determinations, accessed July 6, 2017 https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=72.

[31] CMS National Coverage Determinations, accessed July 6, 2017 https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?ncdid=269. Other payors may have similar guidelines. Aetna's coverage is "consistent with the conclusions of an assessment from the Centers for Medicare & Medicaid Services (CMS, 2008)." Aetna Prothrombin Time (INR) Home Testing Devices, accessed July 6, 2017. http://www.aetna.com/cpb/medical/data/100_199/0173.html.

"no intrinsic value" from the INRatio® products "because the products were not able to perform their function of providing accurate and reliable results for anticoagulant management."[32] He indicates that he "determined" that the products "had no intrinsic value" based on correspondence between FDA and Alere, FDA recalls, and product complaints.[33] However, the information Mr. Andrien relied upon does not provide a basis to reach conclusions as to whether, and to what extent, putative class members received value from the INRatio® products. Most notably, Mr. Andrien did not consider any empirical data or studies relating to the performance of the INRatio® products in reaching this conclusion.

26. In contrast to Mr. Andrien's approach, the accuracy of the INRatio® products can be evaluated empirically. Available data show that in the vast majority of instances the INRatio® products provided accurate results for anticoagulation management, thereby providing patients with value. For example, analysis of the MAPLE data, consisting of more than 186,000 data records comparing INRatio® to lab readings, reveals that the INRatio® readings are accurate within standards established by the International Standards Organization (ISO) the vast majority (97%) of the time.

27. Evaluating actual empirical data is necessary for determining whether putative class members received value from the products and therefore what, if any, economic damage they incurred. By not taking such information into account, Mr. Andrien commits the fundamental mistake he indicates should be avoided. That is, he cautions that "a damages award under the full refund may result in a windfall to plaintiffs because they would receive a full refund of their purchase price, in addition to the value received from their purchase of the product."[34] Mr. Andrien nevertheless assigns a full refund in instances when INRatio® products delivered

[32] Andrien Report, p. 6.

[33] Andrien Report, pp. 11-13.

[34] Andrien Report, p. 14.

accurate readings, effectively creating the economic "windfall" he warns against.

28. Dr. Richard SanGeorge will explain the data that Alere San Diego has collected over time that demonstrate the accuracy of the device. These data are important to my analysis, and I describe my analysis of these data below.

29. To start, Figure 1 below shows what is known as a "density scatter plot" or a "heat map" comparing the readings on the INRatio® device to readings on a lab machine.[35] The plot is constructed by taking each of the 186,384 records from the MAPLE data and plotting the lab reading (x-axis) versus the INRatio® reading (y-axis).[36] The plot is color-coded such that regions with more data points are in red, followed by orange, then yellow, then green, and finally by shades of blue where the fewest number of data points fall. The chart is logarithmically scaled such that the darkest red color on the scale corresponds to 10,000 data points, the orange corresponds to 1,000 data points, green corresponds to 100 data points, and the darkest blue regions have 1 data point. The white regions have no data points.

30. The purpose of this type of graph is to illustrate how well the INRatio® and lab readings correspond to one another. For example, if the readings on the INRatio® were always equivalent to readings on the lab machine, we would expect the data points (and hence the red colors showing the dense regions of the plot) to

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[35] In this section, I describe the accuracy of the INRatio® product compared to a lab reading. I understand that lab readings also vary depending on a number of circumstances. *See* FDA Public Workshop, "Point of Care PT/INR Devices for Monitoring Warfarin Therapy," pp. 126-128, *available at* https://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM491546.pdf. Nevertheless, in this section I measure the accuracy of the INRatio® device in comparison to a lab without consideration of the possibility that the lab reading could be incorrect. In this respect, any inferences from this section about the accuracy of the INRatio® device will overstate the degree to which the INRatio® device's readings are inaccurate since it could be the case that the INRatio® is correct and the lab is not.

[36] Note that the maximum INR reading in the MAPLE data is 10 for lab readings and 7.5 for device readings.

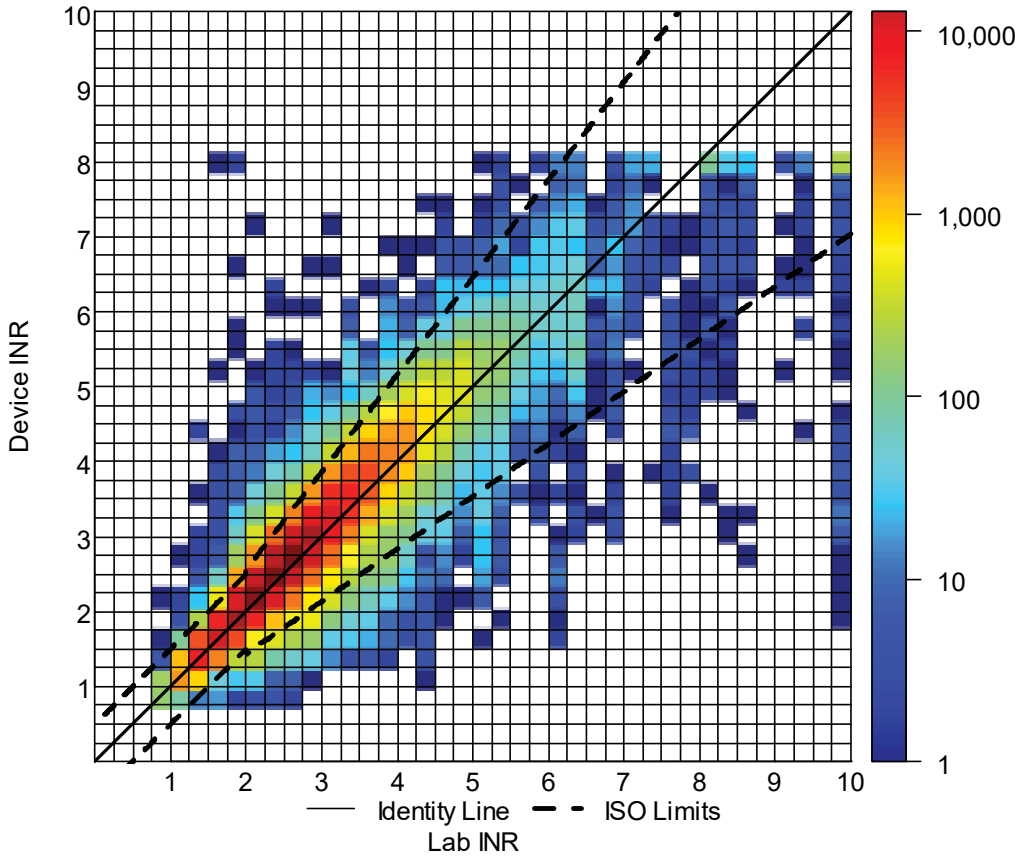
fall along a diagonal line running from the lower left to upper right corner of the plot. This is sometimes referred to as the "identity line" as it traces out the region of the plot where the two readings would fall if they are exactly identical. If instead, as Mr. Andrien categorically asserts, the INRatio® products "had no intrinsic value," "provided incorrect readings," and "were harmful to patients and provided them with negative value" then the data points may be spread randomly within the plot, and the density would not be concentrated around the "identity line."[37]

31. Turning to the plot of the actual data, the darkest red regions in fact primarily fall along the 45 degree "identity line." This means that INRatio® very often yielded similar if not identical readings to the lab machine. In addition, the next densest regions of the plot (the oranges and yellows) typically fall relatively close to the "identity line." For example, the ISO standards relating to INR home monitoring devices indicate that 90% of readings should fall within 0.5 INR units of the lab reading for lab INRs less than 2 and within 30% of the lab reading for lab INRs greater than or equal to 2.[38] As shown in the figure, the reds, oranges, and yellows generally fall within the dashed lines, which indicate the ISO limits for accuracy. This demonstrates that while some readings do not necessarily match the lab reading exactly, they are close enough to meet the ISO accuracy standard.

[37] Andrien Report, pp. 10-11.

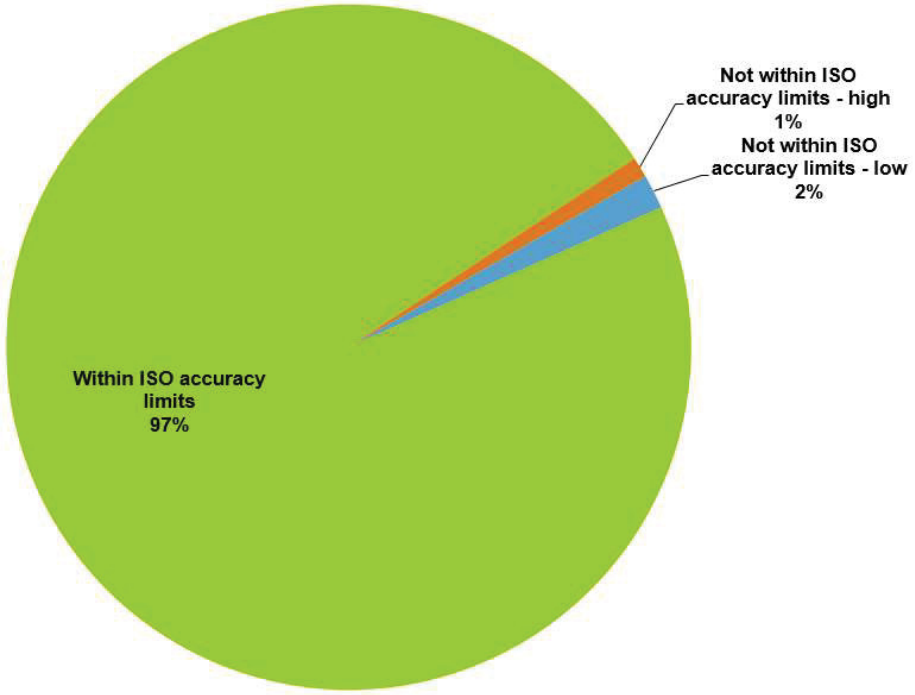
[38] FDA Public Workshop, "Point of Care PT/INR Devices for Monitoring Warfarin Therapy," p. 192, *available at* https://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM491546.pdf. The ISO accuracy standard does not indicate criteria for INR results greater than or equal to 4.5. In the figures below, I use the 30% criteria associated with INR results between 2 and 4.5 for all INR values greater than or equal to 2.

Figure 1: Scatter plot comparing INRatio® to lab readings from MAPLE



32. Figure 2 below provides a more aggregate view of the results from the MAPLE data. It shows that 97% of all readings fall within the ISO limits of accuracy. In other words, 97% of the data points in Figure 1 are within the dashed lines.

Figure 2: Aggregated results of MAPLE data



33. In summary, my analysis of the MAPLE data demonstrates that the vast majority of readings with the INRatio® product were accurate within standards established by the ISO, which is inconsistent with Mr. Andrien's and Plaintiffs' categorical assertions that INRatio® products "had no intrinsic value," "provided incorrect readings," "were harmful to patients and provided them with negative value," "effectively did not monitor anything," and were "worthless."[39]

34. Moreover, in light of the empirical evidence discussed above, identifying whether and to what extent any individual putative class member had discrepant readings and/or had complications as a result would involve an individualized patient-by-patient inquiry. Mr. Andrien has made no attempt to

[39] Andrien Report, pp. 10–11. First Amended Complaint, pp. 11, 15.

address this in his report.

V. MR. ANDRIEN'S ASSERTION THAT "NO REASONABLE CONSUMER" WOULD HAVE PURCHASED THE INRATIO® PRODUCTS DOES NOT CONSIDER THE PROCESS AND MANNER IN WHICH PATIENTS RECEIVE THESE MONITORS

35. In addition to asserting that no patients received value from the INRatio® products, Mr. Andrien also concludes that "no reasonable consumer would have purchased the defective INRatio Products had they known the truth."[40] Mr. Andrien's conclusions in this respect are flawed, primarily because he has not considered the perspective of physicians or the factors that influence physician choices among devices to recommend to patients. These are prescription medical devices, which implicates physician knowledge, not just the knowledge of patients.

36. Mr. Andrien did not consider the perspective of physicians, who understand the medical benefits of home monitoring, understand that devices may provide results that differ from lab testing, have access to information about competitive products through a wide range of sources, and can assess what alternatives will best suit the needs of particular patients. Rather, Mr. Andrien approaches his analysis from the standpoint of the patient and does not take into account the role of physicians in mediating the selection of prescription medical products, in weighing risk, and in relaying information to patients. Physicians have considerable information at their disposal in considering testing options, including their own experience with the product, information from package inserts, literature, colleagues, or technical materials provided by the manufacturer. Mr. Andrien's sole focus on consumers is therefore misplaced.[41]

37. An analysis of INRatio® use also necessitates consideration of the factors that influence choices among INR monitoring options. Mr. Andrien has not

[40] Andrien Report, p. 13.

[41] Indeed, the First Amended Complaint mentions the role of "informed healthcare providers." First Amended Complaint, p. 44.

evaluated or analyzed any such factors, nor has he considered whether and to what extent purported additional information about the accuracy of the INRatio® devices would affect clinician choices. Recognizing that patient compliance is an important goal, features such as ease of use, amount of blood required, product packaging, prior experience, or manufacturer responsiveness to questions may play into a decision to use INRatio® products versus an alternative. How does the physician's own experience with INRatio®, lab testing, or other home monitoring devices affect his or her views of the product? Not having analyzed criteria upon which choices of device are made, Mr. Andrien has no basis for his opinion that "reasonable consumers" would not have obtained these devices.

38. While I am not a medical or clinical expert, it is clear that a variety of information was publicly available about the performance of the INRatio® products during the putative class period. For example, information was available in literature and the package insert. (I discuss the INRatio® package insert in Section VII.) Indeed, plaintiffs cite a 2007 article purportedly showing that INRatio® was less accurate than other home monitoring devices when compared against a lab machine. Notably, had any physician read this article or been aware of it then he or she would have access to the type of information that Mr. Andrien appears to suggest market participants were unaware of.

39. Finally, each physician's perspective, and in particular the attributes he or she considers when recommending an INR monitoring method or device, are individualized issues. Assessing them would therefore involve a physician-by-physician and patient-by-patient inquiry. Mr. Andrien has not made any attempts to address these individualized issues in his report.

VI. MR. ANDRIEN'S COMPUTATION OF PAYMENTS MADE BY PUTATIVE CLASS MEMBERS IGNORES IMPORTANT INFORMATION RELEVANT TO HIS CLAIM THAT A "FULL REFUND" IS AN APPROPRIATE DAMAGES MODEL

40. With respect to Mr. Andrien's actual computation of damages, I find

that he makes two errors:

- First, his calculations include payments made by putative class members and their insurers. He has not, however, explained the basis on which putative class members can pursue claims on behalf of third-party payors.
- Second, his calculations treat all payments as if they were for the products at issue, but for most patients, AHM provides a bundled service and does not sell monitors and strips. The service *includes* providing testing materials (monitor and strips), and also includes training and a reporting system for sharing patients' test results with their physicians. This further causes an overstatement of the amounts putative class members paid for the products at issue.

41. For most products and services in healthcare settings (e.g., pharmaceuticals, devices, physician services, hospital services), insurers typically cover the majority of payment, and consumers are typically responsible for a copay or coinsurance, sometimes after fulfilling a deductible. Reimbursement structures for the INRatio® products are no different. For example, under Medicare reimbursement, patients are generally responsible for 20% of the fee for every four tests performed, with Medicare covering the remaining 80%.[42] Further, many patients have supplemental insurance that will pay for all or some portion of the

[42] "For services paid under the physician fee schedule (physician office or IDTF), patients are responsible for 20% of the Medicare allowed amount after they satisfy the annual Medicare Part B deductible. (Slightly higher copayments may be charged if the services are billed by a non-participating physician who does not accept assignment. Charges are subject to the limiting charge rules under these circumstances.)" *See* Roche, "2015 Medicare Reimbursement Handbook for Healthcare Professionals," *available at* http://www.coaguchek-usa.com/content/dam/internet/dia/coaguchek/coaguchek-usa_com/coaguchek_hcp/pdf/CoaguChek-Medical-Reimbursement-Handbook-for-HCP.pdf, p. 35.

20% the patient would otherwise be responsible for. For example, Kaiser Family Foundation statistics during the putative class period indicate that 86% of Medicare beneficiaries had supplemental insurance coverage.[43] Indeed, these features of the market are made apparent in the deposition of Sallie Kennedy:

> Q. Does every patient pay the same price? A. No. … Q. So there are variations in amount that patients pay? A. Correct. What are the criteria that determines the variations? A. Their insurance. So their insurance tells us what we are allowed to charge by contract and the patient if the patient has a copayment. Then that copayment is based on a percentage of that contracted amount that the insurance company determines….The insurance company would adjudicate. And then a copayment, if they did not have a secondary insurance or a Medicaid crossover then the payment -- then that copayment would go to the patient.[44]

42. Consistent with this evidence, Exhibit 6 of Sallie Kennedy's deposition pertaining to AHM indicates that "[t]hese services would have been paid for by the full spectrum of payors with only a small percentage of payments being made by private individuals."[45]

43. Despite this, Mr. Andrien computes damages as the sum of all revenue AHM and ASD received in connection with INRatio® use in the Patient Self Testing (PST) segment, including both patient and insurance payments.[46] He has not explained whether putative class members have any right to recover payments made

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[43] Kaiser Family Foundation, "A Primer on Medicare: Key Facts About the Medicare Program and the People it Covers," accessed July 6, 2017, http://www.kff.org/report-section/a-primer-on-medicare-what-types-of-supplemental-insurance-do-beneficiaries-have/.

[44] Kennedy Dep. at 40:7–41:15.

[45] Kennedy Dep. Exh. 6 ALR_AND0000020298 at 303.

[46] Andrien Report, p. 6.

on their behalf.

44. Furthermore, my understanding is that the revenue Mr. Andrien has included in his damages calculation for AHM includes the IDTF services AHM provides. In particular, the revenues AHM receives associated with PST include payments for services that AHM provides in supplying testing materials, as well as facilitating information sharing with the treating physician and training patients.

45. Because his calculations include payments made not only for the products at issue but also for services that AHM provides, including services which are not specific to the use of INRatio®, Mr. Andrien further overstates potential damages.

VII. MR. ANDRIEN HAS NOT CONSIDERED KEY FACTORS THAT GIVE RISE TO INDIVIDUALIZED ISSUES AND DEMONSTRATE THAT THE MAJORITY OF PUTATIVE CLASS MEMBERS LIKELY DID NOT INCUR ECONOMIC DAMAGES

46. My understanding is that all of the putative class members need some form of INR monitoring.[47] Unlike some consumer goods (e.g., a new television), simply foregoing "a purchase" is not an option. As a result, an analysis of whether and to what extent any given putative class member was harmed by the purported conduct entails an assessment of each class member's economic situation in the actual world as compared to a "but-for" world in which their INR is monitored. This introduces additional considerations that Mr. Andrien has not evaluated that give rise to individualized issues among putative class members and indicate that the vast majority of putative class members likely would not have incurred any economic damage as a result of the purported conduct. Two major considerations are as follows:

- Patient payments in the "but-for" world. All putative class members would have made payments for INR testing even if they used a different brand of device or underwent lab testing. In

[47] First Amended Complaint, p. 22-34.

fact, for patients on Medicare and many insurance plans, reimbursement for home INR monitoring is set at a fixed level regardless of the brand of device used. This observation, in conjunction with empirical evidence that the vast majority of INRatio® readings were accurate, illustrates that putative class members could not have been harmed economically in most instances: they had accurate readings and paid a fixed amount (and if patients switched off of INRatio®, they would receive replacement testing materials at no extra charge). Moreover, determining whether a patient's payments were subject to an insurance contract, the nature of that contract in terms of the patient's payment responsibility, or whether a patient purchased the INRatio® products directly out of pocket is an individualized issue that will vary across putative class members.

- Performance of INR monitoring in the "but-for" world. Because Mr. Andrien computes damages as the full amount paid by every putative class member in connection with the INRatio® products, he is implicitly comparing the performance of the INRatio® to a standard of perfection, not to an empirically based benchmark. Moreover, his assertion that "no reasonable consumer" would use the products also does not take into account the performance of potential alternatives and how that would affect choices. Evidence regarding benchmarks makes clear that Mr. Andrien's implicit comparison to a standard of perfection is unrealistic, and therefore Mr. Andrien's assessment of the economic impact on putative class members is inaccurate.

47. For patients covered by insurance, home INR monitoring payments are generally based on reimbursement codes that are not specific to a particular brand of

device. See, for example, the Medicare G0249 code quoted above.

48. The implication is that any patient covered by Medicare will have an identical price, regardless of whether they are using the INRatio® or, for example, the CoaguChek®. Moreover, the prices at which Alere or Roche sell the devices to their direct customers (distributors) will not affect the price paid by the patient in these instances.

49. This is an important observation because it means that in the "but-for" world, the patient's payments will be the exact same as they were in the actual world, even if he or she used a competing home monitoring device. Thus, in the majority of instances patients received a device that provided accurate results (see Section IV) at a fixed price that would be unaffected by the brand of device.

50. Moreover, had patients opted to monitor their INRs by visiting a lab testing facility or anticoagulation clinic instead of utilizing home monitoring, they still would incur associated costs. For example, while lab testing is reimbursed differently than home monitoring, patients still would have incurred copays or coinsurance fees associated with lab tests and physician office visits. They would also bear the inconvenience and associated costs of transportation to and from testing facilities, which are not incurred with home monitoring. They could also experience less time in therapeutic range, giving rise to the potential for increased health care costs.

51. I note that some putative class members appear to have purchased the INRatio® products out of pocket and therefore did not obtain them pursuant to the types of insurance contracts referenced above. Per Sallie Kennedy's testimony, it appears that this would be a rare occurrence.[48] Unlike under the insurance contracts discussed above, these patients' payments may vary depending on the market price

[48] Kennedy Dep. at 35:4–8. "Q. Is it possible for someone to pay for the device without any insurance? A. There have been a few cases, but we're talking maybe two or three out of a hundred thousand patients."

of the available products. However, determining whether a patient's payments were subject to an insurance contract, the nature of that contract in terms of the patient's payment responsibility, or whether a patient purchased the INRatio® products out of pocket is an individualized issue that will vary across putative class members. Mr. Andrien has made no attempt to address this in his report.

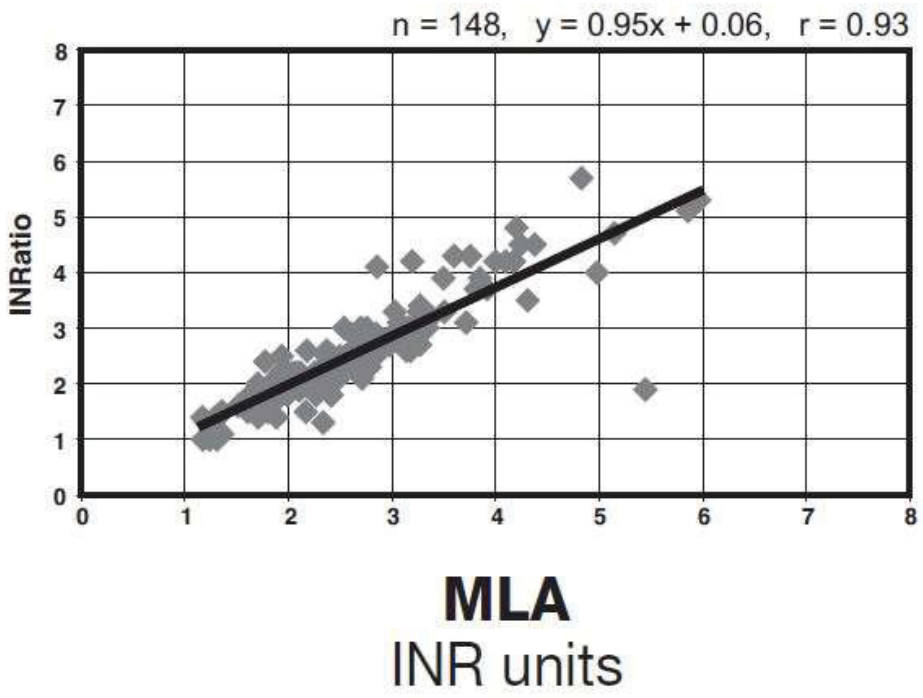
52. Mr. Andrien also does not consider the accuracy and performance of potential alternatives to the INRatio® products. To evaluate the economic impact on putative class members of device inaccuracy, a correct analysis would compare INRatio® to empirically based benchmarks. For example, if the INRatio® products hypothetically did not work in 2 out of every 5,000 patients, but market participants reasonably expected that the products would not work in 1 out of every 5,000 patients, then there would be 1 instance of "unexpected" lack of performance, not 2. The same logic applies if comparing INRatio® to an alternative method of monitoring that does not work in 1 out of every 5,000 patients.

53. Because Mr. Andrien computes damages as the full amount every putative class member paid in connection with the INRatio® products, he is implicitly comparing the performance of the INRatio® to a standard of perfection, not to an empirically based benchmark. Potential benchmarks may include physicians' expectations of the INRatio® product performance, alternative methods of monitoring INR, or alternative home monitoring devices. My purpose in describing these potential benchmarks is not to render an opinion from the standpoint of a medical expert or clinician as to a precise comparison of performance between INRatio® and potential alternatives. Rather, from the standpoint of an economic damage computation, it is my opinion that comparison to relevant benchmarks is the correct approach. Here, a standard of perfection, as Mr. Andrien implicitly assumes, is not the correct benchmark when evaluating potential economic damage.

54. For example, Mr. Andrien does not consider physicians'

contemporaneous understanding and expectation of the accuracy of the INRatio® products. Alere's FDA-compliant package insert, for example, demonstrates that perfect concordance with a lab device would not be expected. A graph from INRatio's® package insert is reproduced below.[49] It shows that the INRatio® readings are accurate, but at times vary from the lab reading. For example, a point in the lower right corner appears to be just under 2 based on the INRatio® reading but around 5.5 based on the lab reading. Thus, the package insert (much like the actual device performance discussed in Section IV) shows that the INRatio® readings are accurate but will occasionally diverge from the lab result. The package insert is thus inconsistent with Mr. Andrien's methodology, which implicitly compares INRatio® performance to a standard of perfection.

Figure 3: Excerpt from INRatio® package insert comparing INRatio® to lab readings



[49] Alere. "INRatio® PT/INR Test Strips Package Insert," 2013.

55. I also understand that a possible alternative to using INRatio® would be to forego home monitoring altogether. However, I understand that home monitoring has benefits for qualified patients compared with using a lab or anticoagulation clinic for testing.[50] Thus, the potential clinical downside of these alternatives would need to be considered in the "but-for" world to the extent that was the alternative chosen for a particular putative class member.

56. Further, other brands of home monitoring devices could be alternatives in the "but-for" world. However, I understand that these potential alternative devices would not produce "perfect" readings in every instance.[51] This too is inconsistent with Mr. Andrien's methodology, which implicitly compares INRatio® performance to a standard of perfection.

VIII. CONCLUSION

57. In conclusion, Mr. Andrien has not performed the type of empirical or

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[50] *See*, e.g., Hanna E. Bloomfield *et al*., *Meta-analysis: Effect of Patient Self-testing and Self-management of Long-Term Anticoagulation on Major Clinical Outcomes* (Annals of Internal Medicine, 2011). Joseph Garcia-Alamino *et al*., *Self-monitoring and Self-management of oral anticoagulation* (Cochrane Database of Systematic Reviews, 2010). Carl Heneghan *et al.*, *Self-monitoring of oral anticoagulation: systematic review and meta-analysis of individual patient data* (Lancet, 2012). David Matchar *et al. Effect of Home Testing of International Normalized Ratio on Clinical Events* (New England Journal of Medicine, 2010). David Matchar *et al., The impact of frequency of patient self-testing of prothrombin time on time in target range within VA Cooperative Study #481: The Home INR Study (THINRS), a randomized, controlled trial* (Journal of Thrombosis and Thrombolysis, 2015).

[51] Sara Vazquez, Ryan Fleming, and Stacy Johnson, *Comparison of two point-of-care international normalized ratio devices and laboratory method*, Blood Coagulation and Fibrinolysis (2017). *See also* FDA Public Workshop, "Point of Care PT/INR Devices for Monitoring Warfarin Therapy", p. 45, *available at* https://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM491546.pdf. In addition, a large study has shown clinically equivalent outcomes with INRatio®2 versus Roche's CoaguChek XS®. *See* Jan Brouwer, Hugo Stoevelaar, and Christoph Sucker, *The Clinical Impact of Different Coagulometers on Patient Outcomes*, (Advances in Therapy, 2014), p. 639.

scientific analyses necessary to support his conclusions. In contrast, my analyses of the available data and information illustrate that Mr. Andrien's key conclusions are unfounded and at odds with demonstrable fact. Mr. Andrien also commits errors that cause him to overstate the amount of any purported damage, even under his flawed framework. I also conclude that a robust analysis of whether and to what extent any given putative class member incurred economic damage due to the purported conduct entails an analysis of the "but-for" world, which Mr. Andrien has not undertaken. Finally, I conclude that accurately assessing economic damages would give rise to individualized issues among putative class members, and the vast majority of putative class members likely did not incur any economic damage as a result of the purported conduct.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 27 day of July, 2017 at Washington, DC.

Benjamin William Douglas Scher

Andren, Dina and Bludman, Sidney v. Alere, Inc., et al.
U.S.D.C. Southern District of California, Case No. 16-cv-01255-GPC-NLS

PROOF OF SERVICE

I am a resident of the State of California, over the age of eighteen years, and not a party to the within Action. My business address is Sedgwick LLP, 333 Bush Street, 30th Floor, San Francisco, CA 94104. On July __, 2017, I served the within document:

DECLARATION OF BENJAMIN WILLIAM DOUGLAS SCHER IN OPPOSITION TO PLAINTIFFS' MOTION FOR CLASS CERTIFICATION

☑ MAIL – by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, in the United States mail at Chicago, Illinois, addressed as set forth below.

☐ PERSONAL SERVICE - by personally delivering the document(s) listed above to the person(s) at the address(es) set forth below.

☐ OVERNIGHT COURIER - by placing the document(s) listed above in a sealed envelope with shipping prepaid, and depositing in a collection box for next day delivery to the person(s) at the address(es) set forth below via **FEDERAL EXPRESS.**.

☐ ELECTRONIC MAIL– by causing the document(s) listed above to be sent via ELECTRONIC MAIL to the person(s) listed below. I did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct. Executed on July __, 2017, at San Francisco, California.

_____

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Scher Declaration

Appendix A

Appendix A. Curriculum vitae of Benjamin William Douglas Scher

SUMMARY OF EXPERIENCE

Ben Scher is an expert in providing data-driven insights to help solve complex problems. He has extensive experience performing empirical analyses of large data sets, conducting statistical and economic analysis, and serving as lead consulting expert in government investigations and through all phases of litigation. Mr. Scher's work has focused extensively on the healthcare and life sciences sectors. He has served as lead consulting expert for drug manufacturers, medical device manufacturers, and healthcare providers on numerous engagements, many of which involve alleged False Claims Act (FCA) violations. He also recently served as a testifying expert for a large healthcare provider in a matter involving allegations of FCA violations. Many of the matters Mr. Scher has consulted on involve hundreds of millions of dollars or more in controversy.

SELECTED EXPERIENCE

- In *United States ex rel. George v. Fresenius Medical Care Holdings, Inc.*, served as testifying expert on behalf of Fresenius Medical Care. Analyzed several large internal databases and claims databases. Deposition taken January 2016. In late 2016, majority of opposing expert's opinions excluded under *Daubert* and Fresenius granted summary judgment on FCA claims.
- Serving as lead consulting expert for a large hospital chain facing a government investigation relating to allegations of FCA violations. Analyzing sampling and extrapolation methods used by the Government and determining appropriateness and statistical validity of the approach. Evaluating potential economic damages. Presented analyses to counsel for DOJ.
- Serving as lead consulting expert for a medical device manufacturer facing a government investigation regarding allegations of FCA violations for several products. Utilizing several large data sets pertaining to the products at issue and their clinical usage to perform statistical and empirical analyses of the allegations. Evaluating potential economic damages. Presented analyses to counsel for DOJ and OIG on several occasions.
- Provided a report relating to statistical analysis of several data sets to a medical device manufacturer in support of its interactions with FDA regarding its manufacturing of a certain product.
- Serving as lead consulting expert for a large provider of healthcare services. Analyzing several large internal data sets to gather insights on issues relating to the frequency and medical appropriateness of certain services. Assisting counsel in discussions with the government.

- Serving as lead consulting expert for a pharmaceutical company facing an investigation relating to alleged off-label promotion. Evaluating causation and potential economic damages using several large data sets pertaining to the sales and reimbursement of the products. Assisting counsel in discussions with the government.
- Serving as lead consulting expert for a medical device manufacturer facing a government investigation regarding allegations of alleged kickbacks and medically unnecessary services. Analyzing several large data sets relating to the sales and pricing of certain products and the frequency of certain services.
- Served as lead consulting expert for a major drug manufacturer throughout a multiyear government investigation spanning several products and qui tam allegations. Provided consulting expertise on liability, causation, and damages. Allegations included off-label promotion, violations of the Anti-Kickback Statute, and violations of federal and state FCA laws. Analyzed hundreds of millions of claim records submitted to Medicare and state Medicaid programs. Also analyzed the manufacturer's pricing patterns and medical providers' prescription and drug administration patterns. Evaluated potential economic damages. Worked closely with counsel for several years throughout various phases of government investigations and litigation. Participated in settlement discussions with the government.
- Serving as lead consulting expert for a major nationwide healthcare provider facing allegations of FCA violations stemming from the frequency with which certain services were provided. Analyzing several large databases to evaluate potential causation and economic damages.
- Served as co-lead consulting expert for a major brand drug manufacturer in a matter involving allegations of off-label marketing. Worked with several large databases to provide insight on causation and potential economic damages issues. Evaluated statistical validity of approach used by Relator's expert to sample sales representatives and their "call notes."
- Worked on behalf of a specialty pharmacy in a matter involving allegations of Anti-Kickback Statute violations. Supported multiple experts throughout the litigation and provided advice to counsel at trial.
- Provided data analytics and meta-analysis of healthcare literature on behalf of a medical device manufacturer in support of its interactions with FDA regarding the performance of certain products.
- Provided data analytics, cost-benefit analyses, and meta-analysis of healthcare literature on behalf of a medical device manufacturer in support of its interactions with FDA regarding a potential expansion of the approved indications for a product.

- Served as lead manager supporting expert analyses of Dr. B. Douglas Bernheim on behalf of Amgen in *Amgen, Inc. v. F. Hoffman-La Roche Ltd*. The court was considering whether to grant a permanent injunction barring F. Hoffman-La Roche from selling and marketing a product that infringed Amgen's patents. Analyses and testimony focused on the implications of recently introduced Medicare reimbursement policies on competitive dynamics among drug manufacturers and the impact of the potential entry of F. Hoffman-La Roche's product on Amgen, healthcare providers, Medicare, and third-party payors. Evaluated discovery documents and data and provided advice to counsel throughout expert and fact witness depositions and the permanent injunction hearing. The court granted a permanent injunction in Amgen's favor, barring F. Hoffman La-Roche from entering the US market with its competing drug.
- Supported several experts including Dr. Eric M. Gaier on behalf of pharmaceutical manufacturers in various matters involving allegations pertaining to the published Average Wholesale Prices for prescription drugs. Assisted experts with analyses of common impact, feasible damage methodologies, and merits. Sample matters worked on include *In re Pharmaceutical Industry Average Wholesale Price Litigation*; *State of Nevada v. American Home Products Corp.*; *State of Montana v. Abbott Labs.*; *Swanston v. TAP Pharmaceutical Products Inc.*; *Commonwealth of Massachusetts v. Mylan Laboratories, Inc.*; and *State of Wisconsin v. Amgen Inc*.
- Supported the expert work of Dr. Eric M. Gaier on behalf of Augustine Medical, Inc. defending an illegal monopolization counterclaim in *Augustine Medical, Inc. v. Mallinckrodt, Inc*. Responsibilities included assisting the expert in analyses of market definition, market power, competitive impact, and damages. The matter was dismissed by summary judgment, and the opinion of the opposing expert was excluded under *Daubert*.
- Worked on behalf of AMD in the landmark microprocessor antitrust case *AMD v. Intel*. Led a team supporting Dr. B. Douglas Bernheim to review documents and depositions pertinent to understanding Intel's and AMD's relationships with their customers. Before the case was brought to trial, AMD and Intel agreed to a $1.25 billion settlement that included restrictions on certain business practices of Intel.
- Provided analysis of terms in contracts between American Express and merchants on behalf of American Express. These terms were alleged to be anticompetitive by the United States Department of Justice and several states, as well as by several direct action merchants in two different matters.
- Supported expert testimony of Dr. Randal Heeb in *United States v. Dicristina* regarding econometric and game theoretical evidence. The case centered on the question of whether poker is a form of gambling, and therefore illegal under the Illegal Gambling Business Act (IGBA). Based on analyses conducted using a data set of more than 415 million hands of online No Limit Hold'em poker, Bates White demonstrated that poker is, in fact, predominantly a game of skill, not chance. Judge Jack B. Weinstein ultimately ruled that poker is "predominated by skill" and therefore does not fit the definition of gambling under the IGBA.
- Supported the expert work of Dr. Eric M. Gaier on market definition, market power, and competitive impact on behalf of the District of Columbia in *District of Columbia v. CVS Corp.*

- Supported Dr. Keith Waehrer on behalf of Allflex in *Allflex USA, Inc. v. Avid Identification Systems, Inc*. The case involved allegations that defendant Avid engaged in exclusionary conduct involving radio frequency identification microchips for pets. Supported Dr. Waehrer's economic analysis of relevant markets, market power, and the impact of the conduct at issue.

PUBLICATIONS

- "Similar Products at Different Prices: Can Biopharmaceutical Companies Segment Markets?," with Christopher Stomberg, Richard Manning, Kathleen Twigg, and Andrew Huson, *International Journal of the Economics of Business* 22, no. 2 (2015): 231–44.
- "Medicare Part B Data Made Available to the Public: A Wealth of Information, but Approach with Care," with Kathleen Twigg and Andrew Huson, *Pharmaceutical Executive*, Nov. 2014.
- "Empirical Analysis of Causation and Damages in Off-Label Marketing Cases," with Eric M. Gaier and Arun Sharma, Bates White Economic Consulting, Apr. 2013.

PRESENTATIONS AND PANELS

- Participated as an expert witness in McDermott Will & Emery's Expert Training Program, May 2015 and 2017
- "Medicare Part B physician payments," presented at Bates White's Life Sciences Symposium, June 2014

EDUCATION

- BS, Policy Analysis and Management, Cornell University

Scher Declaration

Appendix B

Appendix B. Materials considered

- Deposition of Deborah Blundell, Apr. 18, 2017.
- Deposition of Sallie Kennedy, May 10, 2017.
- Deposition of Sallie Kennedy, Exh. 6, ALR_AND0000020298-304.
- Expert Report of Jeffrey S. Andrien, June 21, 2017.
- First Amended Complaint, Oct. 3, 2016.
- MAPLE data.
- Bloomfield, Hanna E., Ange Krause, Nancy Greer, Brent C. Taylor, Roderick MacDonald, Indulis Rutks, Preetham Reddy, Timothy J. Wilt, *Meta-analysis: Effect of Patient Self-testing and Self-management of Long-Term Anticoagulation on Major Clinical Outcomes* (Annals of Internal Medicine, 2011).
- Brouwer, Jan, Hugo Stoevelaar, and Christoph Sucker, *The Clinical Impact of Different Coagulometers on Patient Outcomes*, (Advances in Therapy, 2014).
- Garcia-Alamino, Joseph, AM Ward, P Alonso-Coello, R Perera, C Bankhead, D Fitzmaurice, CJ Heneghan. S*elf-monitoring and Self-management of oral anticoagulation* (Cochrane Database of Systematic Reviews, 2010).
- Heneghan, Carl, Alison Ward, Rafael Perera, Clare Bankhead, Alice Fuller, Richard Stevens, Kairen Bradford, Sally Tyndel, Pablo Alonso-Coello, Jack Ansell, Rebecca Beyth, Artur Bernardo, Thomas Decker Christensen, Manon Cromheecke, Robert G Edson, David Fitzmaurice, Alain P A Gadisseur, Josep M Garcia-Alamino, Chris Gardiner, Michael Hasenkam, Alan Jacobson, Scott Kaatz, Farhad Kamali, Tayyaba Irfan Khan, Eve Knight, Heinrich Körtke, Marcel Levi, David Bruce Matchar, Bárbara Menéndez-Jándula, Ivo Rakovac, Christian Schaefer, Andrea Siebenhofer, Juan Carlos Souto, Rubina Sunderji, Kenneth Gin, Karen Shalansky, Heinz Völler, Otto Wagner, Armin Zittermann. *Self-monitoring of oral anticoagulation: systematic review and meta-analysis of individual patient data* (Lancet, 2012).
- Matchar, David, Alan Jacobson, Rowena Dolor, Robert Edson, Lauren Uyeda, Ciaran S. Phibbs, Julia E. Vertrees, Mei-Chiung Shih, Mark Holodniy, Philip Lavori. *Effect of Home Testing of International Normalized Ratio on Clinical Events* (New England Journal of Medicine, 2010).
- Matchar, David, Sean R. Love, Alan K. Jacobson, Robert Edson, Lauren Uyeda, Ciaran S. Phibbs, Rowena J. Dolor. *The impact of frequency of patient self-testing of prothrombin time on time in target range within VA Cooperative Study #481: The Home INR Study (THINRS), a randomized, controlled trial* (Journal of Thrombosis and Thrombolysis, 2015).

- Vazquez, Sara, Ryan Fleming, Stacy Johnson. *Comparison of two point-of-care international normalized ratio devices and laboratory method* (Blood Coagulation and Fibrinolysis, 2017).
- Aetna, "Prothrombin Time (INR) Home Testing Devices," accessed July 6, 2017, http://www.aetna.com/cpb/medical/data/100_199/0173.html.
- Alere. "INRatio® PT/INR Test Strips Package Insert," 2013.
- Centers for Medicare & Medicaid Healthcare Common Procedure Coding System – General Information, accessed July 6, 2017, https://www.cms.gov/Medicare/Coding/MedHCPCSGenInfo/index.html.
- Centers for Medicare & Medicaid Services, "Decision Memo for Prothrombin Time (INR) Monitor for Home Anticoagulation Management," accessed July 6, 2017, https://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=72.
- Centers for Medicare & Medicaid Services, "National Coverage Determination (NCD) for Home Prothrombin Time/International Normalized Ratio (PT/INR) Monitoring for Anticoagulation Management (190.11)," accessed July 5, 2017, https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?ncdid=269.
- Centers for Medicare & Medicaid System, "Pub 100-04 Medicare Claims Processing," *available at* https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R1562CP.pdf.
- Kaiser Family Foundation, "A Primer on Medicare: Key Facts About the Medicare Program and the People it Covers," accessed July 6, 2017, http://www.kff.org/report-section/a-primer-on-medicare-what-types-of-supplemental-insurance-do-beneficiaries-have/.
- PR Newswire, "Inverness Medical Innovations Changes Name to Alere," July 15, 2010, accessed July 6, 2017, http://www.prnewswire.com/news-releases/inverness-medical-innovations-changes-name-to-alere-98538494.html.
- Roche, "2015 Medicare Reimbursement Handbook for Healthcare Professionals," *available at* http://www.coaguchek-usa.com/content/dam/internet/dia/coaguchek/coaguchek-usa_com/coaguchek_hcp/pdf/CoaguChek-Medical-Reimbursement-Handbook-for-HCP.pdf.
- SEC Edgar Archives data, "Inverness Medical Innovations to Acquire Hemosense, Inc.," accessed July 6, 2017, https://www.sec.gov/Archives/edgar/data/1127393/000119312507173736/dex991.htm.
- SEC Edgar Archives data, Alere 2017 10-k filing, Exhibit 21.1, *available at* http://otp.investis.com/clients/us/alere/SEC/sec-show.aspx?FilingId=12111258&Cik=0001145460&Type=PDF&hasPdf=1.
- U.S. Food and Drug Administration Public Workshop, "Point of Care PT/INR Devices for Monitoring Warfarin Therapy," *available at*

https://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM491546.pdf.

- U.S. Food and Drug Administration, 510(k) Premarket Notification, *available at* https://www.accessdata.fda.gov/cdrh_docs/reviews/K110212.pdf.
- U.S. Food and Drug Administration, 510(k) Premarket Notification, accessed July 6, 2017, https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K021923.
- U.S. Food and Drug Administration, 510(k) Premarket Notification, accessed July 6, 2017, https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm?ID=K072727.
- U.S. Food and Drug Administration, 510(k) Premarket Notification, *available at* https://www.accessdata.fda.gov/cdrh_docs/pdf9/K092987.pdf.

Alt Declaration

Exhibit 3

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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

DINA ANDREN, SIDNEY BLUDMAN, VIRGINIA CIOFFI, BERNARD FALK, JEANETTE KERZNER-GREEN, CAROL MONTALBANO, and DONALD RIGOT, individually, and on behalf of other members of the general public similarly situated,

Plaintiffs,

v.

ALERE INC., a Delaware corporation, ALERE HOME MONITORING, INC., a Delaware corporation, ALERE SAN DIEGO, INC., a Delaware corporation,,

Defendants.

Case No. 16-cv-01255-GPC-AGS

CLASS ACTION

DECLARATION OF RICHARD SAN GEORGE, PH.D IN SUPPORT OF DEFENDANTS' OPPOSITION TO PLAINTIFFS' MOTION FOR CLASS CERTIFICATION

Date: September 22, 2017
Time: 1:30 p.m.
Place: Courtroom 2D
221 W. Broadway, Ste. 2190
San Diego, California 92101

Judge: Hon. Gonzalo P. Curiel
Magistrate: Hon. Andrew G. Schopler
Action Filed: May 26, 2016
Trial Date: None Set

DECLARATION OF RICHARD SAN GEORGE, PH.D.

I, Richard San George, declare as follows:

1. I know the following of my own personal knowledge, based on my knowledge of events relevant to this case, and from my education, training and professional experience. If called upon to testify, could and would testify as follows:

2. I currently serve as Vice President of Clinical Affairs for Alere San Diego, the manufacturer of the INRatio® and INRatio®2 Systems (collectively "INRatio® Systems"). I am very familiar with the INRatio® Systems, how they work, how they have been used, the data supporting system accuracy, and the technical issue which led to the December 5, 2014 Urgent Medical Device Correction and eventually to the July 2016 Voluntary Market Withdrawal. I am also knowledgeable about discussions between the U.S. Food and Drug Administration ("FDA") and Alere San Diego from 2014 through 2016. I am also knowledgeable about other PT/INR devices for testing at Point of Care (POC), their performance characteristics, and I am knowledgeable about laboratory reference methods for INR testing. In this declaration, I will explain why the INRatio® Systems provided, for the vast majority of users, a safe, reliable way to monitor their PT/INR values, and to adjust their warfarin medication appropriately.

Background

3. I hold a Bachelor of Science Degree in Chemistry from Bucknell University, and a Ph.D. in Biochemistry from Fordham University. I have held faculty positions at Fordham and at Albert Einstein College of Medicine, and have spent the entirety of my professional career in the area of medical diagnostic research. My work has focused on methods for diagnosing attributes of blood chemistry such as cardiac biomarkers for detection of myocardial infarction and heart failure; glucose and hemoglobin A1c for diagnosis and monitoring of diabetes; total cholesterol, HDL cholesterol, LDL cholesterol and triglycerides for assessment

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of risk for cardiovascular disease; biomarkers for aid in diagnosis of pulmonary embolism and deep vein thrombosis, biomarkers for assessment of kidney and liver function; and coagulation assays to measure clotting factors and clotting abnormalities including the methods for measuring INR to monitor anticoagulation therapy. In addition, I have experience with methods for detection of infectious diseases such as respiratory infections like flu, RSV and strep A; tests for detection of viruses such as HIV, hepatitis B, Dengue, Zika, and others; and tests to detect malaria. I have worked with large automated blood chemistry analyzers used in central hospital laboratories and with small handheld point-of-care (POC) systems used by patients at home. I lead a large clinical trials department and am considered an expert in clinical trial design and execution for numerous diagnostic and therapy management product evaluations and research investigations. I have attached a copy of my CV as Addendum A hereto.

4. In my position at Alere San Diego, I have become very familiar with the INRatio® Systems. In 2014, I was called on to help spearhead the Company's investigation of several reports of injury we received in early 2014. Between that time and the time of INRatio®'s market withdrawal, I became very knowledgeable about the performance characteristics of the INRatio® Systems, how those characteristics changed over time, and third party standards applicable to these and similar devices. As part of my work, I also have become familiar with other POC devices, and lab methods, used by clinicians to evaluate INR.

How the INRatio® Systems Operate

5. I will start this discussion by explaining the INRatio® technology, and how the system takes a drop of blood and turns it into an INR reading.

6. To perform a test using the INRatio® system, the patient gathers all the materials needed: meter, test strip, sterile lancet and lancing device, alcohol wipe and gauze. The patient places the meter on a flat surface and turns it on. The meter

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goes through a self-check and when OK, prompts the patient to insert a test strip. The patient removes the test strip from the pouch in which it is packaged (after being at room temperature for at least 5 minutes) and inserts the strip into the meter. The meter then displays a 5 digit calibration code which the patient compares to the code on the test strip; if they match the patient presses OK, and if not the patient enters the correct code. While the meter warms the strip, the patient prepares to perform a fingerstick by cleaning the finger with an alcohol wipe (hands should have previously been washed with warm water and dried) and letting it air dry or wiping with gauze. The patient inserts the lancet into the lancing device and performs the fingerstick by holding the lancing device firmly against the finger and pressing the button. A hanging drop of blood is obtained by gently squeezing the finger. After the meter has warmed the test strip, it prompts the patient to apply the blood. The patient applies the hanging drop of blood directly into the sample well of the test strip. When sufficient blood is applied the meter will beep and "testing sample" will appear on the meter display. The meter performs the test and the INR result is displayed in about one minute.

7. The meter measures the clotting time by measuring electrical impedance over time. Before the test strip fills with blood, the impedance is effectively infinite since the electrodes in the sample chamber of the test strip are separated only by air. As the chamber fills, the electrical impedance drops rapidly due to the presence of the conducting blood sample. During the filling process the red blood cells, which are normally discoid or spherical in shape, become elongated or elliptical due to the force of flow and become aligned in the direction of the flow. When the chamber is fully filled, the impedance reaches a minimum and then rises as the red blood cells relax from the elliptical shape and aligned orientation to discoid shape and random orientation. The impedance then reaches a maximum and begins to decrease again as the blood mixes with the thromboplastin reagent (consisting of lipids and protein) of the test strip and starts to clot. Clot formation is

initiated by thromboplastin followed by a cascade of reactions culminating in the formation of thrombin (an enzyme). The thrombin, once formed, catalyzes the conversion of fibrinogen (a blood protein) to fibrin (a slightly smaller version of fibrinogen which reacts with itself to form a ropelike mesh that is the framework for the blood clot) which polymerizes to form fibrin strands and ultimately the fibrin blood clot. The fibrin strands contract and compact the red blood cells into spherical and polyhedral shapes around which plasma can flow, providing a pathway for electrical conductance and concomitant decrease in impedance. As the clotting process reaches completion, the impedance goes through an inflection point and becomes more constant (that is, the decrease in impedance begins to flatten). The meter software detects this inflection point and converts the time in seconds at which the inflection point is observed into an INR value through calculations using the calibration parameters established for the test strip.

8. It should be noted that the INRatio® Systems can provide erroneous results for a number of reasons, including operator error and health status. This information is included in the User Guide and the Package Inserts for the test strips.

Background on Other INR Testing Methods and Relevant Standards

9. I now provide some basic information about how lab methods and devices yield INR information, their accuracy, and their consistency with each other.

10. A big difference between prothrombin time and INR measured on laboratory systems versus POC systems is that lab systems make the measurements on plasma, while POC systems make the measurements on whole blood. Lab methods use a variety of technologies to detect the formation of the clot, such as optical, mechanical and electrochemical detection, to name a few.

The calculation of INR was intended to standardize the measurements of prothrombin time among many reagents, analyzers and sample types, and while it has had some success in this regard, it has not fully accomplished this goal. There

remain differences among laboratory methods for measuring INR, among POC methods for measuring INR, and between laboratory and POC methods for measuring INR. There are many reasons and sources for these differences that are beyond the scope of this disclosure to describe, but some include the methods of clot detection, pre-analytical sample handling, uncertainty in the thromboplastin reagent ISI assignment and calibration, thromboplastin reagent age, source of thromboplastin reagent, and sample type including hematocrit of whole blood sample.

Are there any laboratory INR methods that are better than the others? Not really. The only method that can be considered the gold standard is the World Health Organization (WHO) tilt tube method; however, this method is limited to just a few reference labs in the world and can be performed only by certified technologists. Among the commercially available laboratory INR methods, some may have better precision (although most are good), but it is not possible to say that any one is more accurate than another. Furthermore, since calibration is performed only in the range of INR 2.0 – 4.5, there is uncertainty in the accuracy of all methods where INR is greater than 4.5. These limits apply to POC INR methods as well. The graph below highlights just how much lab tests can differ depending on the use of different reagents.

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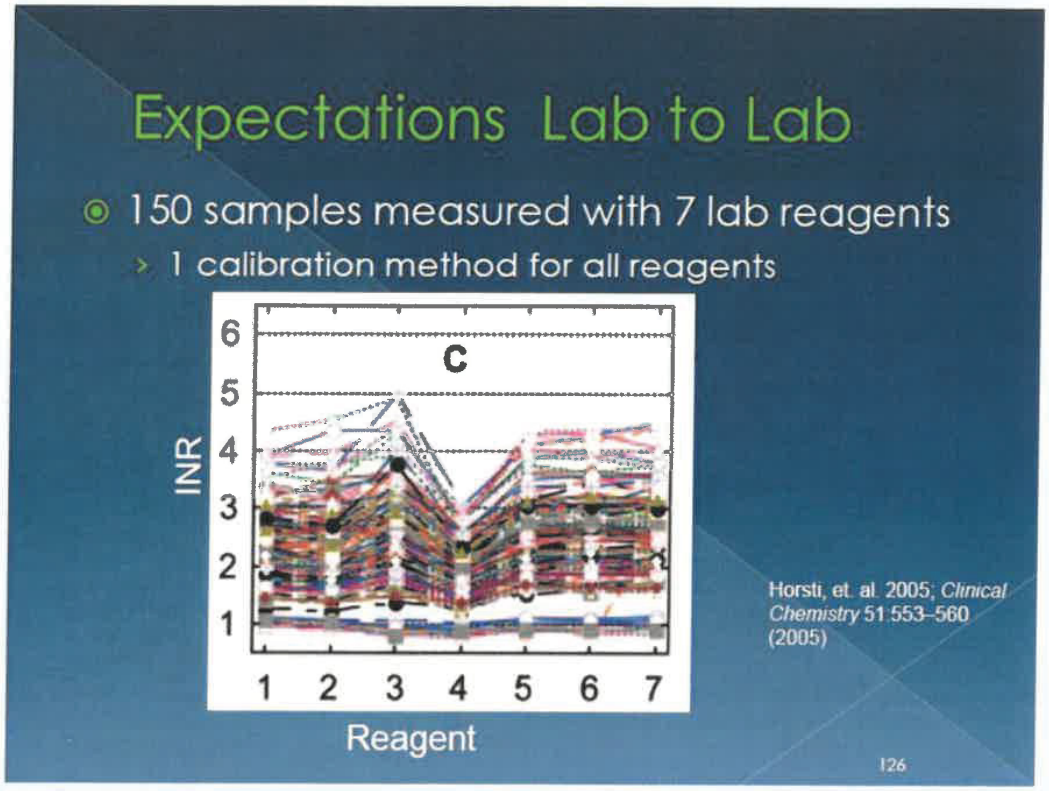
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Because the accuracy of laboratory INR methods differ among themselves, it is not possible for a POC INR method to agree with all laboratory methods. This is well-illustrated in the publication by Plesch *et al*, Thromb Res 2008; 123: 381-389 where some laboratory methods appear to run about 15% low, while others run about 15% high, a spread of 30%. It is impossible for a POC method to agree with all these lab methods when the lab methods do not agree among themselves.

11. The FDA has never established performance criteria for POC devices, but the International Standards Organization (ISO) has done so. Specifically, ISO 17593 provides that 90% of results obtained on a POC device must be within the following ranges: for INR less than 2.0, the allowable difference is ± .5 INR; for INRs from 2.0-4.5, the allowable difference is ±30%; and for INR above 4.5, no specification has been set. The ISO standard does not prescribe maximum degrees of difference for the 10% of tests that may fall outside of the specified ranges. In

the absence of specific guidance from the FDA, the ISO standard provides a good basis for determination of acceptable performance with respect to accuracy, as the standard was established by an expert panel of clinicians, laboratorians, regulators, statisticians, and industry representatives, and thus represents a consensus expert opinion and not that of a single individual or organization.

Accuracy and Precision of the INRatio Device

12. Our package inserts provide a scatter plot graph showing the accuracy of INRatio® results as compared to our reference method. For the original INRatio system, the scatterplot shows INR results obtained on INRatio versus INR results obtained on the MLA system, which was the laboratory reference INR method used at that time. The slope of the regression line was 0.95 with a y-intercept of 0.06 indicating a high level of accuracy (slope of 1.0 and y-intercept of 0.0 represent the line of identity in comparing the results). For the INRatio®2 system, results were presented in the package insert for INRatio®2 fingerstick whole blood INR versus a laboratory reference INR method, the plasma INR obtained on the Sysmex CA-560 system using Dade Innovin reagent. The slope and y-intercept for professional operators was 1.05 and 0.05 respectively, and for patient self-test (PST) operators these parameters were 1.07 and 0.19 respectively.

We also provide "precision" data, which addresses variation in results obtained simultaneously.

13. In addition to these data, we have many years' worth of data in which we collected side-by-side INR results from INRatio® and from a reference laboratory method on samples from patients attending anticoagulation clinics during the test strip calibration process. We refer to these as our MAPLE data. The INR results were collected between January 2012 and April 2015 on 8984 unique patient samples (with multiple measurements per sample) and included results from both the INRatio® and INRatio®2 test strips. The MAPLE data set consists of 186,384 INR results obtained on both the INRatio® System (fingerstick whole blood) and the

Sysmex CA-560 system using Dade Innovin reagent laboratory reference method (plasma). In the INR range less than or equal to 2.0, there were 35,554 results of which 35,000 – 98.4 % – were within the ISO allowable difference of ±0.5 INR units. In the INR range of 2.0 to 3.50, there were 125,804 results of which 122,945 – 97.7% – were within the ISO allowable difference of ±30%. In the INR range of 3.51 to 4.50 there were 18,372 results of which 17,646 – 96.0% – were within the ISO allowable difference of ±30%. Overall, 97.7% of all results with INR of 4.50 or lower were within the ISO allowable difference (175,591 out of 179,730).

If the remaining results in the INR range of greater than 4.50 are included and the ISO allowable difference of ±30% is applied to this higher range, then 181,621 out of 186,384 – 97.4% –of INRatio INR results were within the ISO allowable differences from the Sysmex laboratory reference method. These results demonstrate a consistently high level of accuracy for the INRatio system over an extended period of time.

14. There were numerous continuous improvement efforts throughout the time that Alere San Diego manufactured the INRatio® test strips after the acquisition of the System from HemoSense. Design changes included changes to the electrode configuration and sample chamber geometry, enlarged sample well for ease of sample application, and addition of reagents to reduce interference from heparin. Manufacturing changes included increasing the number of samples tested during calibration and quality control release to improve the certainty of the results and assure the required accuracy, exclusion of samples with very low and very high hematocrit, lowering the allowable number of error codes observed, requiring precision (%CV) of ≤7.3% for therapeutic samples and ≤7.6% for normal samples, and requiring 85% of INRatio results to be within ±15% of the reference INR results.

15. The Plaintiffs have cited a paper published in 2007 by Moore *et al* (Blood Coagulation & Fibrinolysis 18 (3):287-292) which was cited by Sidney

Wolfe of Public Citizen as evidence of poor performance of the INRatio® System. There are a number of limitations to the results presented in this paper, and they certainly do not reflect the actual performance of the INRatio system over the many years of its commercial use. First, the authors use the correlation coefficient as a measure of accuracy; it is surprising that the authors or the reviewers/editors of the journal would accept this measure because the correlation coefficient is well-known to be a poor measure of accuracy, especially when it is applied over a narrow concentration range of samples as the authors applied it here (for example, over INR ranges of <2.0, 2.1-3.0, and 3.1-4.0) with small numbers in each range. The correlation coefficient is based on a ranking of values by each method, and so when the range of results is narrow, the rankings can easily be different. This is hardly a measure of accuracy; moreover the correlation coefficient is sensitive to single values of very different rank. The authors found a proportional bias between the INRatio and the lab reference method, but as shown above, there can be large differences among laboratory methods, and POC methods cannot compare favorably with them all. In fact, in the paper cited earlier (Plesch et al, Thromb Res 2008; 123: 381-389), it was the Sysmex CA-1550 with Dade Innovin that ran the lowest among the lab methods; since this was the lab method in the Moore et al. paper, it may be much of the reason that the INRatio "appeared" to run high. No single paper represents the definitive performance of the INRatio® System. If he wanted, Sidney Wolfe of Public Citizen might have cited the paper by Taborski et al, J Thromb Thrombolysis 2004 18(2): 103-107, on which the senior author was Heinz Völler. Völler is one the leading anticoagulation experts in the world. The authors compared INRatio® to the STA Compact system with Dade Innovin reagent laboratory reference method and concluded that, "In the hands of professionals the INRatio™ demonstrated very good accuracy and precision and an excellent technical reliability." The best representation of the performance of the INRatio®

system is the MAPLE data set described above, which is based on an extraordinary number of results.

Potential for Discrepant Results

16. In their motion for class certification, Plaintiffs have asserted that the INRatio® System is worthless, and has no intrinsic value because it cannot do the job it was designed to do. In support of this assertion, they argue that the ROCKET-AF trial demonstrated that the device was inaccurate. I will speak briefly to each of these issues, to explain why they are not evidence that the device was unable to fulfill its clinical function.

Discrepant Results

17. As noted above, lab methods and POC devices both yield results that will deviate from other methods, and have allowable ranges of difference as specified by ISO. Thus, the fact that two tests do not provide the same result does not mean that one is outside of the ranges specified, and it does not mean that the results cannot be used to guide warfarin therapy. In fact, once the therapeutic range is set using the POC system, it is just a matter of maintaining INR within that therapeutic range using the same INR system; it is relative changes in INR that matter when adjusting warfarin dose.

18. The issue that we brought to FDA's attention in the fall of 2014 did not involve the day-to-day accuracy of the device, but rather a particular phenomenon that could occur in patients who have long INR times. During the course of 2014, we determined that, on very rare occasions, certain patients with extended clotting times (an INR >6), could receive discrepant low results because the software algorithm in the device could have difficulty detecting very subtle differences in impedance in the samples from such patients.

19. Our research indicated that this type of event was very rare. It is rare primarily because only about 1% of all INR results on samples from patients on warfarin anticoagulation therapy are >6. Of these, only about 30% exhibit a weak

slope change curve and only 6% exhibit a discrepant low result defined as 4 or more INR units lower. Thus, the rate of discrepant low results when the true INR is >6 is about 0.059%, or about 6 in 10,000. Furthermore, a single discrepant low result does not necessarily lead to a bleeding event or any other serious adverse event. While different definitions of discrepant low result can be used, they all tell the same story. If discrepant low result is defined as an INR result that is 50% of the true INR when the true INR is >6 , then the rate of discrepant low result is about 0.057%. When the true INR is <6, then a result that is 50% lower poses much lower risk.

ROCKET-AF Data

20. In early 2016, another source of criticism about INRatio® arose in connection with public controversy over FDA's approval of the prescription anticoagulant Xarelto®. Xarelto® operates differently than warfarin, and does not require INR monitoring. As with any medication, Xarelto® has risks, one of which is uncontrolled bleeding events. Reports of adverse events such has uncontrolled bleeds caused a number of interested parties to refocus attention on the data that supported the drug's approval by FDA in 2012. In addition, attention was refocused on Xarelto® approval by FDA because Dr. Robert Califf was nominated to the position of FDA Commissioner in September 2015 and confirmed in February 2016. Previously, Dr. Califf had a lead role at the Duke Clinical Research Institute that ran the clinical trial that evaluated the safety and effectiveness of Xarelto®. That clinical trial, known as the ROCKET-AF trial, involved a multi-year comparison between patients with atrial fibrillation (AF) taking Xarelto® and patients with AF taking warfarin at clinical sites around the world. Researchers monitoring INR for patients in the warfarin arm of the study used INRatio®. After Alere issued the Urgent Medical Device Correction in December 2014, attention focused on whether inaccuracy in the INRatio® System may have caused the warfarin arm of the ROCKET-AF study to perform poorly, making the Xarelto® arm look more

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favorable than it would have otherwise, and for Xarelto® to have gained approval as a result.

21. The manufacturers of Xarelto®, as well as independent public health agencies such as the European Medicines Agency (EMA), have re-analyzed the ROCKET-AF study, and have uniformly concluded that use of the INRatio® device not affect the decision to approve Xarelto®. These studies looked at, among other things, data collected at weeks 12 and 24 of the ROCKET-AF trial, when INRatio® readings could be compared to a laboratory reference method used by Duke University. A re-analysis of these data done by Janssen (Xarelto® manufacturer) and the FDA concluded that INRatio® yielded INR results that were lower than the laboratory method by an average of 13%. They hypothesized that this may have translated into a small increase in the relative risks for bleed events, while reducing the risk of stroke events.

22. The Janssen and FDA reanalysis of the ROCKET-AF data has a number of methodological flaws that I will not address in detail, except to make three points. First, we do not know the exact laboratory reference method used by Duke University, or how/if it was validated; it is a research method and not an FDA-cleared method and uses an insensitive thromboplastin reagent. As shown above, laboratory methods differ from each other, and it is entirely possible, if not likely, that this played a role in the differences between INRatio® and the lab results. Second, even at a 13% average difference, the vast majority of INRatio® test results fell within the ISO standards for accuracy when compared to this laboratory method of unknown performance. The analysis performed by the EMA, and agreed with by Janssen and FDA, illustrated this point: "In terms of differences for measurements With or Without recall related time, the data are consistent with previously provided information that nearly 90% of the Warfarin treated subjects in both groups had no discrepancy observed between the Lab based INR value and the Device based INR value at Week 12 or Week 24 (87% of INR fall in range)". Here "With and Without

recall related time" refer to patients with or without medical conditions listed in the 2014 Urgent Medical Device Correction.

Third, the original INRatio® device used in the ROCKET-AF trial is not the one that the company marketed from 2009 onward. Rather, the INRatio®2 system made incremental improvements that led to increased accuracy and precision. The INRatio®2 System withdrawn from the market in 2016 was not the same system used in the ROCKET-AF trial.

23. As a final matter, it is true that the FDA asked ASD to withdraw the INRatio® Systems from the market. We disagreed with the FDA's judgment, but complied with its request. However, it is important to note that the FDA's judgment does not mean that the device was unable to perform its intended function for the vast majority of persons who used it. The evidence discussed above proves otherwise. Moreover, notwithstanding its request that we remove the device from the market, the FDA did acknowledge that it was appropriate for patients to continue using the INRatio® Systems until their physicians could transition them to another INR testing method.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 27 day of July, 2017 at San Diego, California.

By: _____
Richard San George, Ph.D.

Sedgwick LLP

San George Addendum A

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PROFILE

Highly accomplished clinical research professional with executive management experience in the *in vitro* diagnostics industry. Results driven leader for clinical validations, discovery and outcomes research in cardiology, diabetes, infectious disease and other areas. Experienced in point-of-care diagnostics including home, patient self-test and CLIA waived systems. Strong relationship builder and site management team member. Excellent ability to set and achieve strategic business goals for new products.

EXPERIENCE

Alere, formerly Inverness Medical Innovations (San Diego, CA) **2010-present**
Vice President Clinical Affairs **2012-present**
Senior Director, Clinical & Medical Affairs **2010-2012**

Leader of department of about 35 consisting of clinical directors, scientists, trial managers, research associates, trial assistants, data managers and biostatisticians designing and executing 25-35 studies worldwide for all company GBUs: cardiovascular acute and chronic care, diabetes/metabolic syndrome, infectious disease, DOA/Tox and women's health, and for company divisions around the world (see also below). Responsible for oversight of post-market clinical studies worldwide for all GBUs. Leader for Scientific Affairs in North America with 5 additional reports. Leader for Medical Affairs with responsibility for medical advisory boards, consultants and relationships with thought leaders. Alere San Diego site R&D leader and member of Alere global R&D leadership team. Supervised additional R&D team of 15 for 2 years.

Inverness Medical Innovations, (Waltham, MA) **2006-2010**
Director Clinical Research **2009-2010**

Developed clinical study strategies, study designs, protocols and reports in support of new product introductions for all company SBUs by integrating inputs from key stakeholders in R&D, regulatory affairs, biostatistics, SBU and outside opinion leaders to achieve definitive results for validation of the clinical utility and performance of point-of-care (POC) assays for troponin, CKMB, myoglobin, BNP, D-Dimer, NGAL, INR (professional use, heparin bridging, and patient self-test), hemoglobin A1c, total cholesterol, HDL, LDL, triglycerides, hsCRP, PlGF, gastric cancer, CD4 cells, and Tox 15 panel; scientific lead for first ever evaluations of heart failure patient self-testing of BNP in the home; developed error grids for CLIA waiver for BNP, hsCRP and LDL; headed AMI publication committee; directed 2 clinical scientists and a medical writer.

Scientific/Medical Affairs Director **2008-2008**

Provided scientific support for sales in northeast region of US through relationship building with key customers and opinion leaders, promoting the clinical utility and operational efficiencies of POC systems for cardiac markers, D-Dimer and DOA/Tox used in ED settings, troubleshooting, and providing continuing medical education. Directed studies to validate innovative POC systems for counting CD4 cells and for performing nucleic acid testing using PCR to monitor anti-retroviral therapy in HIV-positive individuals.

Clinical Program Director **2006-2008**

Directed all clinical studies related to validation of new POC coagulation device for measuring INR and monitoring coumadin anticoagulation therapy including accuracy assessments and CLIA waiver studies for professional and patient self-test intended uses in the US; provided support in Europe for patient self-management studies, accuracy evaluations, publications and independent performance assessements; provided technical direction for R&D verification and validation, and manufacturing QC specifications for coagulation program. Directed multi-site investigation into the clinical utility of ischemia modified albumin (IMA) in the diagnosis and prognosis of sepsis; provided technical support for manufacture of IMA reagent, controls and calibration verification materials, and for multi-site study investigating the clinical utility of IMA as a biomarker for cardiac ischemia in chest pain patients in the emergency room. Developed clinical strategy for novel BNP device intended for monitoring and management of heart failure patients in professional POC and home use settings. Provided leadership for cardiology clinical affairs department.

AgaMatrix, (Cambridge, MA, Salem, NH) **2004-2006**
Vice President Clinical Affairs **2005-2006**
Vice President R&D **2004-2005**
Director of Quality & Regulatory Affairs **2004-2004**

Provided organizational and product development leadership for diabetes care startup company. Wrote design control procedures and created initial quality systems. Provided lead role in specification of product requirements, risk analysis, human factors, feasibility studies, verification and validation, and design transfer for innovative blood glucose monitoring (BGM) systems. Developed glucose test strip reagent and glucose control solutions for internal and external uses. Developed calibration traceability procedure and directed clinical studies to verify system calibration and accuracy. Directed and conducted more than a dozen external clinical studies to evaluate ease of use, accuracy and alternate site testing of new BGM system for prototype development, CE Mark, 510k clearance and post market surveillance. Provided technical support for all regulatory submissions.

LifeScan (Waltham, MA) **2003-2003**
Clinical Evaluations

In this contract assignment, directed a multi-center post-market clinical outcome research study to evaluate the UltraSmart diabetes management product. Responsibilities included development of study protocol and case report forms, clinical site selection and initiations, selection of hemoglobin A_{1c} reference method and central laboratory, selection of clinical research organization for data management and study monitoring, establishment of clinical site research agreements, and management of IRB submissions and approvals. Other

responsibilities included development of department quality systems and planning for additional clinical studies. Managed clinical research group of four.

Design Mentor (Pelham, NH) **2001-2003**
Vice President R&D **2002-2003**
Director & Program Manager **2001-2002**

Directed and managed the product development services provided to biotech and medical device clients assuring that engineering, chemistry, hematology, business and marketing needs were integrated into a viable customer-centric product. Product development programs included automation of the process for pathogen inactivation of red blood cells, design of novel cardiac assist pump devices, and cancer diagnostics. Participated in establishing the strategic direction of the company and in devising and implementing the tactical mechanisms consistent with the overarching corporate principles and goals of this start-up organization. Managed group of upto 25 engineers.

Independent Consultant (Harvard, MA) **2000-2001**
Diagnostic and Clinical R&D

Provided consulting services to clients in the medical diagnostic industry. Work included the evaluation of new methods for the measurement of homocysteine, investigation of methods for the diagnosis of mad cow disease and CJD, planning and execution of clinical trials for new blood glucose monitoring devices, and evaluation of novel methods for determination of hemoglobin A_{1c}.

Bionostics (Devens, MA) **1998-2000**
Vice President & Chief Technology Officer

Provided leadership as the company's technology visionary while playing a key role in strategic business development, client relationships, and corporate revenue growth. Made key contributions to several new product introductions and contracts in the company's existing critical care quality control product line and business. Led the company into the new diabetes care quality control product line and business that diversified the company's product offerings and manufacturing capabilities, and enhanced its potential for future business growth. Revenue more than doubled during this period. Directed R&D group of 3-6.

Instrumentation Laboratory, (Orangeburg, NY) **1997-1998**
Director of Product Support

Head of department responsible for technical support for the manufacture of $100M of coagulation and critical care reagents, controls and calibrators, transfer of new products from R&D and other manufacturing sites into manufacturing, complaint investigations and corrective actions, and stability programs in a FDA regulated GMP and ISO facility; member of plant management team. Managed group of 5-10.

SAGE BIOCHEM (Waltham, MA) **1996-1997**
President

Founded company to provide professional consulting services to the medical diagnostics industry, and to fund and develop a diagnostic blood test for alcoholism.

Instrumentation Laboratory (Lexington, MA) **1987-1995**

R&D Program Manager **1994-1995**

Managed design and development of new automated blood coagulation analyzers; performed worldwide market and competitive system analysis and developed concepts with strategic business unit; analyzed standard costs, development costs and processes; performed feasibility, simulations, and wrote system requirements specifications with R&D engineers; prepared budgets, schedules, plans, and managed interdepartmental interfaces.

R&D Manager, Core Reagent Technologies **1993-1994**

Provided management and technical direction as needed for group of 15 including 6 Ph.D. scientists. Department projects included the application of routine and immuno chemistries to the ILab 900 clinical chemistry analyzer with R&D group in Milan, Italy; β-site evaluation of the ILab 900; development of homogeneous latex particle agglutination immunoassays for the Monarch and ILab 900 chemistry analyzers with R&D group in Barcelona, Spain; expression and production of recombinant proteins; purification of antibodies, recombinant and other proteins for clinical reagents; and development of quality control materials for blood gas, co-oximetry and electrolyte measurements. Prepared and managed department budgets.

R&D Manager, Core Chemistry Reagents **1990-1993**

Managed and provided technical direction for development of new and OEM reagents for the Monarch chemistry systems from concept through market release including reagents for measuring lipids, enzymes, metabolites, and DAUs. Directed development of clinical chemistry reagent applications and α-site evaluation of new clinical chemistry analyzer. Developed APTT reagent and normal coagulation control for ACL analyzer. Managed group of 10-15 scientists.

Principal Scientist **1988-1990**

Senior Scientist **1987-1988**

Performed feasibility and development of liquid stable reagents for ALP, AST, ALT, BUN, and GGT for the Monarch; developed NCEP standardized methodologies for cholesterol and HDL cholesterol; evaluated and developed the fluidic, optical, and thermal regulation systems of a new chemistry analyzer; wrote and developed new calibrator value assignment protocols; supervised 3 scientists.

Albert Einstein College of Medicine (New York, NY) **1980-1987**

***Associate**, Department of Biochemistry* **1983-1987**

Research on a diagnostic test for alcoholism; determined the sites and structures of the chemical modifications of human hemoglobin by acetaldehyde and other metabolites of ethanol, and developed methods for their quantitative determination; investigated the structures of the post-translationally modified hemoglobins found in alcoholism; used EI and FAB mass spectrometry of peptide and polypeptide adducts, ^{13}C NMR of labeled peptides and proteins, reverse phase and ion exchange HPLC of proteins and polypeptides, peptide mapping, amino acid analysis, ^{3}H and ^{14}C radiolabeling methods; prepared grant proposals and renewals; ran department mass spectrometer facility; supervised 1 technician.

Instructor, *Dept. of Medicine, Div. of Experimental Hematology* **1982-1983**
Postdoctoral Research Fellow, *Dept. of Medicine, Div. of Experimental Hematology* **1980-1982**

Research on the polymerization of sickle hemoglobin within intact red blood cells by non-invasive NMR methods (^{19}F, ^{31}P, and ^{1}H spin echo); described the effects of magnetic susceptibility heterogeneity in aqueous suspensions of paramagnetic deoxygenated red blood cells on the NMR linewidths and relaxation properties of intracellular nuclei; studied the polymerization of purified sickle hemoglobin in solution by low angle laser light-scattering and NMR relaxation; investigated the structure-function relationships in cooperative dimeric invertebrate hemoglobins by a variety of spectroscopic methods; studied the mode of accumulation by red blood cells of the antimalarial drug mefloquine; prepared grants and manuscripts.

Fordham University (New York, NY)

Adjunct Assistant Professor, School of General Studies **1983-1987**

Lectured undergraduate courses in Organic Chemistry, Organic Laboratory/recitation, and Biochemistry (1 year); supervised 2 teaching assistants.

Postdoctoral Fellow, Department of Chemistry **1980-1980**

Research on the subunit assembly of arthropod hemocyanins using low angle laser light-scattering and using alkylureas and Hofmeister salts as probes of the subunit interactions.

EDUCATION

Ph.D. Biochemistry, Fordham University, New York, NY
B.S. Chemistry, Bucknell University, Lewisburg, PA

CONTINUING EDUCATION

- MIT Sloan School of Management: Managing Complex Product Development Projects, 2002.
- Harvard University Extension School: Financial Accounting, 1993; Total Quality Management, 1992.
- American Management Association: R&D Management, 1992; Project Management, 1991.
- American Association for Clinical Chemistry: Diagnostic Applications of Latex Technology, Theory and Practice, 1992.
- Richard D. De Veaux, Princeton University, at Instrumentation Laboratory: Experimental Design and Analysis, 1988.

PATENTS

- US Patent 5,278,044 - Stable Aqueous NADH Reagent and Kit, 1994
- PCT/US2012/049543 – Methods and Compositions for Monitoring Heart Failure, pending

PROFESSIONAL SOCIETY MEMBERSHIPS

AAAS, AACC, ACS, NCCLS Subcommittee Member - Cholesterol Reference Materials (1994-1996).

HONORS AND AWARDS

NIH National Research Service Award (1980,1981), Phi Lambda Upsilon, Sigma Xi, Alpha Sigma Lambda.

PUBLICATIONS

1. Herskovits, T.T., Cavanagh, S.M. and San George, R.C., *Light-Scattering Investigations of the Subunit Dissociation of Human Hemoglobin A. Effects of Various Neutral Salts.* **Biochemistry** 16: 5795-5801, 1977.

2. Herskovits, T.T., San George, R.C. and Cavanagh, S..M., *Light-Scattering Studies of the Quaternary Structure and Subunit Dissociation of Proteins: The Use of Hydrophobic Solutes and Salts as Probes.* **J. Colloid & Interface Sci.** 63: 226-234, 1978.

3. Herskovits, T.T., Erhunmwunsee, L.J., San George, R.C., and Herp, A., *Subunit Structure and Dissociation of Callinectes Sapidus Hemocyanin.* **Biochim. Biophys. Acta** 667: 44-58, 1981.

4. Herskovits, T.T., San George, R.C., and Erhunmwunsee, L.J., *Light-Scattering Investigation of the Subunit Dissociation of Homarus Americanus Hemocyanin. Effects of Salts and Ureas.* **Biochemistry** 20: 2580-2587, 1981.

5. Herskovits, T.T., Carberry, S.E., and San George, R.C., *Subunit Structure and Dissociation of Homarus Americanus Hemocyanin. Effects of Salts and Ureas on the Acetylated and Unmodified Hexamers.* **Biochemistry** 22: 4107-4112, 1983.

6. Fabry, M.E. and San George, R.C., *Effect of Magnetic Susceptibility on Nuclear Magnetic Resonance Signals Arising from Red Cells: A Warning.* **Biochemistry** 22: 4119-4125, 1983.

7. San George, R.C., Nagel, R.L., and Fabry, M.E., *On the Mechanism for the Red Cell Accumulation of Mefloquine, an Antimalarial Drug.* **Biochim. Biophys. Acta** 803: 174-181, 1984.

8. San George, R.C. and Hoberman, H.D., *Post-Translational Modification of Hemoglobin A in Alcoholism.* **NIAAA Research Monograph No. 17:** Early Identification of Alcohol Abuse, 1985.

9. San George, R.C. and Nagel, R.L., *Dimeric Hemoglobins from the Arcid Blood Clam, Noetia Ponderosa; Structure and Functional Properties.* **J. Biol. Chem.** 260: 4331-4337, 1985.

10. Hirsch, R.E., San George, R.C., and Nagel, R.L., *Intrinsic Fluorimetric Determination of the Stable State of Aggregation in Hemoglobins.* **Anal. Biochem.** 149: 415-420, 1985.

11. San George, R.C. and Hoberman, H.D., *Reaction of Acetaldehyde with Hemoglobin*. **J. Biol. Chem.** 261: 6811-6821, 1986.

12. Borgese, T.A., Harrington, J.P., Hoffman, D., San George, R.C., and Nagel, R.L., *Anadara Ovalis Hemoglobins: Distinct Dissociation and Ligand Binding Characteristics.* **Comp. Biochem. Physiol.** 86B: 155-165, 1987.

13. Hoberman, H.D. and San George, R.C., *Reaction of Tobacco Smoke Aldehydes with Human Hemoglobin.* **J. Biochem. Toxicol.** 3: 105-119, 1988.

14. San George, R.C. and Hoberman, H.D., *Structure of Stable Adducts of Hemoglobin and Acetaldehyde Based on ^{13}C NMR and Mass Spectrometry.* Manuscript in preparation.

Recent publications based on clinical studies sponsored by Alere and designed, conducted and/or written up with direction from R.C. San George:

15. Peacock, W.F., Nagurney, J.T., Birkhahn, R., Singer, A.J., Shapiro, N., Hollander, J.E., Glynn, T, Nowack, R., Safdar, B., Miller, C.D., Peberdy, M., Counselman, F., Chandra, A., Kosowosky, J., Neuenschwander, J., Shrock, J., Plantholf, S., Lewandrowski, E., Wong, V., Kupfer, K., and Diercks, D.B. *Myeloperoxidase in the Diagnosis of Acute Coronary Syndromes. The importance of Spectrum.* **Am Heart J** 162:893-899, 2011.

16. Diercks, D.B., Peacock, W.F., Hollander, J.E., Singer, A.J., Birkhahn, R., Shapiro, N., Glynn, T., Nowack, R., Safdar, B., Miller, C.D., Lewandrowski, E., and Nagurney, J.T. *Diagnostic Accuracy of a Point-of-Care Troponin I Assay for Acute Myocardial Infarction within 3 Hours after Presentation in Early Presenters with Chest Pain.* **Am Heart J** 163: 74-80, 2012.

17. Smith, S.W., Diercks, D.B., Nagurney, J.T., Hollander, J.E., Miller, C.D., Schrock, J.W., Singer, A.J., Apple, F.S., McCullough, P.A., Ruff, C.T., Sesma Jr., and A., Peacock, W.F. *Central Versus Local Adjudication of Myocardial Infarction in a Cardiac Biomarker Trial.* **Am Heart J** 165:273-279, 2013.

18. Maisel, A., Barnard, D., Jaski, B., Frivold, G., Marais, J., Azer, M., Miyamoto, M.I., Lombardo, D., Kelsay, D., Borden, K., Iqbal, N., Taub, P.R., Kupfer, K., Clopton, P., and Greenberg, B. *Primary Results of the HABIT Trial (Heart Failure Assessment with BNP in the Home).* **J Am Coll Cardiol** 61: 1726-35, 2013.

19. DeSantis, G., Hogan-Schlientz, J., Liska, G., Kipp, S., Sallee, R., Wurster, M., Kupfer, K., and Ansell, J., *STABLE Results: Warfarin Home Monitoring Achieves Excellent INR Control.* **Am J Manag Care** 20(3):202-209, 2014.

20. McDonald, K., Troughton, R., Dahlström, U., Dargie, H., Krum, H., Van der Meer, P., McDonagh, T., Atherton, J., Kupfer, K., San George, R., Richards, M., and Doughty, R., *Daily Home BNP Monitoring in HF for prediction of impending clinical deterioration : Results from the HOME HF study.* **EU J Heart Failure** submitted.

ABSTRACTS

1. Fabry, M.E, and San George, R.C., *Detection of Hemoglobin S Polymerization and Hemoglobin C Crystallization in Intact Cells by ^{31}P and ^{19}F NMR.* **22nd Experimental NMR Conference**, Asilomar, CA, 1981.

2. San George, R.C., Fabry, M.E., and Nagel, R.L., *^{19}F NMR Studies of the Uptake and Binding by Red Cells of the Antimalarial Drug Mefloquine.* **Xth International Conference on Magnetic Resonance in Biological Systems**, Stanford University, Stanford, CA, 1982.

3. San George, R.C. and Fabry, M.E., *Magnetic Susceptibility Matching in NMR Studies of Deoxy Red Cells*. **Gordon Research Conference on Magnetic Resonance in Biology and Medicine**, Tilton, NH, 1982.

4. San George, R.C., Nagel, R.L., and Fabry, M.E., *Mefloquine Accummulates in the Red Cell by Binding to the Membrane and Hemoglobin.* **Blood** 60: 24a, 1982.

5. Fabry, M.E. and San George, R.C., *The Effect of Magnetic Susceptibility on NMR Signals Arising from Red Cells.* **24th Experimental NMR Conference**, Asilomar, CA 1983.

6. Hirsch, R.E., San George, R.C., and Nagel, R.L., *Intrinsic Fluorescence Studies of the Hemoglobins of the Clam, Noetia Ponderosa.* **Photochem. Photobiol**. 395: 955, 1984.

7. San George, R.C. and Hoberman, H.D., *Stable Modifications of Hemoglobin by Acetaldehyde.* **Fed. Proc**. 44: 1618, 1985.

8. San George, R.C. and Hoberman, H.D., *Imidazolidinone Adducts of Peptides and Hemoglobin.* **Fed. Proc.** 45: 1614, 1986.

9. San George, R.C. and Hoberman, H.D., *Structure of Stable Acetaldehyde Adducts of Peptides and Proteins: Results of Mass Spectrometric Analysis*. **Fed. Proc.** 46: 2153, 1987.

10. Fannon Jr., W.J., Jordan, S.L., Adiletto, C.A., San George, R.C., and Martin, R.F., *Development of an Improved IL Test Monarch Cholesterol Reagent Which Meets the 1992 NCEP Guidelines.* **Clin. Chem.** 36: 961-962, 1990.

11. San George, R.C. and Szulc, M.E., *Alkaline Phosphatase Activity vs pH Profiles for Controls and Patient Samples in DEA, AMP and Mixed Buffers.* **Clin. Chem.** 36: 1126, 1990.

12. San George, R.C., Roesch, C.M., and Jensen, T.C., *Development of a Two-Component Liquid Stable Alkaline Phosphatase Reagent for the IL Monarch ™ Chemistry Systems.* **Clin. Chem.** 37: 910, 1991.

13. San George, R.C. and Adiletto, C.A., *Development of a Liquid Stable NADH and its Use in 2-Reagent Assays for AST and ALT on the IL Monarch™ Chemistry Systems.* **Clin. Chem.** 37: 912, 1991.

14. Jensen, T.C., Hanford, H., Grant, L.R., and San George, R.C., *Development of a Liquid Stable Urea Nitrogen Reagent for the IL Monarch™ Chemistry Systems.* **Clin. Chem.** 38: 1052-1053, 1992.

15. Studebaker, J.T., Adiletto, C.A., San George, R.C., and McNamara, J.R., *HDL Cholesterol Measurement Using Dextran Sulfate Precipitation and Enzymatic Cholesterol Analysis on the IL Monarch™ Chemistry Systems.* **Clin. Chem.** 38: 1063, 1992.

16. Adiletto, C.A., Alhussaini, K.E., and San George, R.C., *Development of a Liquid Stable Alanine Aminotransferase (ALT) Reagent for the IL Monarch® Chemistry Systems.* **Clin. Chem.** 39: 1157, 1993.

17. Hanford, H., Frontini, D., San George, R.C., and Papagni, M., *Development of a Liquid Stable Glucose Reagent for the IL Monarch® Chemistry Systems.* **Clin. Chem**. 39: 1215, 1993.

18. San George, R.C., *Evaluation of MarChem™ EP_Suite for Windows Software for the Performance of Calculations and the Creation of Graphical Plots Recommended by NCCLS Evaluation Protocols.* **Clin. Chem.** 43: S121, 1997.

19. DeSantis, G., Zhang, M., Kalvelage, K., Lacorte, A., Garcia, E., Kupfer, K., San George**,** R.**,** *Analytical Performance Characteristics of the Enhanced Heparin Insensitive Alere INRatio®/INRatio®2 PT/INR Monitoring System.* **Proceedings of the 11th National Conference on Anticoagulant Therapy**, May 5-7, 2011, Boston MA; **International Society of Thrombosis and Hemostasis**, July 23 -28, 2011, Kyoto, Japan.

Alt Declaration

Exhibit 4

50 State Survey of State Consumer Protection, Deceptive Trade Practices Laws, and Unjust Enrichment

JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
Alabama *Deceptive Trade Practices Act* Ala. Code §§ 8-19-1, *et seq.*	Private right of action permitted, but Ps must send a demand letter fifteen days before filing suit. The attorney general and district attorneys have power to investigate prohibited conduct and start legal proceedings.	Class actions prohibited unless brought by the state's Attorney General.	SOL expires one year from discovery, but no later than four years after the incident - *unless* the contract or warrant is for more than three years then no more than one year from the date of expiration or more than one year after discovery, whichever occurs first.	"Monetary damages" are required for showing of injury.	NA	**Reliance not controlling inquiry**, but misconduct must cause monetary damage.	"A representation is deceptive if it contains a **material claim or omission** that is reasonably like to mislead consumers acting reasonably under the circumstances to their detriment. A representation or omission is material if it is of the kind usually relied upon by a reasonably prudent person."	Defense to culpability if defendant did not knowingly commit violation of the act.	Greater of actual damages or$100; up to three times actual damages in discretion of the court; no prejudgment interest unless recovery based in contract; punitive damages available; attorney's fees mandatory.		**Prefiling demand required and must waive any other cause of action arising out of transaction to bring action under the act.**
	Ala. Code §§ 8-19-1, 8-19-4, 8-19-10	Ala. Code § 8-19-10(f)	Ala. Code § 8-19-14	Ala. Code § 8-19-10(a)(1)		Ala. Code § 8-19-10(a)		Ala. Code § 8-19-13	Ala. Code §§ 8-8-10, 8-19-10(a)(1)-(2)		Ala. Code §§ 8-19-10(e), 8-19-15
	Ex Parte Exxon Corp., 725 So. 2d 930, 933 (1998); *Billions v. White& Stafford Furniture Co., 528* So. 2d 878, 880 (Ala. Civ. App. 1988).	*Ex Parte Exxon Corp.,* 725 So. 2d 930, 933 (1998).		*Billions v. White & Stafford Furniture Co., 528* So. 2d. 878, 880 (Ala. Civ. App. 1988).		*F.T.C. v. Tachman,* 318 F.3d1273, 1281 (11th Cir.2003); *McGregor v. Chierico,* 206 F.3d 1378, 1388 (11th Cir. 2000).	*F.T.C. v. Accent Mktg., Inc.,* No. 02-405, 2002 WL 31257708 (S.D. Ala. July 1, 2002) (internal citations omitted).	*Strickland v. Katko Mfg., Inc.,* 512 So. 2d 714, 717 (1987); *Sam v. Beaird, 685* So. 2d 742, 744 (Ala. Ct. App. 1996).	*Orkin Exterminating Co., Inc. v. Jeter,* 835 So. 2d 25, 43 (2001).		*Deerman v. Fed. Home Loan Mortg. Corp.,* 955 F. Supp. 1393 (N.D. Ala.1997).
Alaska *Unfair Trade Practices and Consumer Protection Act* Alaska Stat. §§45.50.471, *et seq.*	The attorney general may bring suit. Private right of action permitted.	Class actions arguably allowed.	**Two years from discovery of violation.**	Ascertainable loss of money or property is required for a private right of action.	Actual deception not required.	Right of action requires ascertainable loss incurred as a result of violation.	Prohibits: "knowingly concealing, suppressing, or omitting a **material fact** with intent that others rely upon the concealment, suppression, or omission in connection with the sale or advertisement of goods or services whether or not a person has in fact been misled, deceived or damaged."	Intent to deceive need not be proven. However, intent that others rely upon the concealment, suppression, or omission in connection with the sale or advertisement of goods is needed.	Greater of three times actual damages or $500; prejudgment interest not exempted; discretionary punitive damages allowed; attorney's fees allowed; injunctive relief available; treble damages for willful violations.		Written notice prior to action for injunction required; 50% of punitive damages go to the state.
	Alaska Stat. §§45.50.531(a), (c)		Alaska Stat. §45.50.531(f)	Alaska Stat. §§45.50.471, 45.50.531(a)	Alaska Stat. §§45.50.471, 45.50.531(a)	Alaska Stat. § 45.50.531(a)	Alaska Stat. § 45.50.471(b)(12)	Alaska Stat. §45.50.471(b)(12)	Alaska Stat. §§ 09.30.070,45.50.53 1(a), 45.50.535		Alaska Stat. §§ 45.50.531(i),45.50.53 5
		Weimer v. Continental Car & Truck, LLC, 237P.3d 610 (2010)*; Neese v. Lithia Chrysler Jeep of Anchorage, Inc.,* 210P.3d 1213 (2009).		*Garrison v. Dixon,* 19P.3d 1229, 1235 n.22 (2001) ("A person who suffers an ascertainable loss of money or property as a result of another person's act or practice declared unlawful by AS45.50.471 may bring a civil action.")		*C.f., State v. O'Neill Investigations Inc.,* 609P.2d 520, 534-35 (1980) (finding that "actual injury as a result of the deception is not required." "All that is required is a showing that the acts and practices were capable of being interpreted that way.")		*Odom v. Fairbanks Mem'l Hosp.,* 999 P.2d123, 132 (2000); *State v. O'Neill Investigations, Inc.,* 609 P.2d 520, 535 (1980).	*State v. O'Neill Investigations Inc.,* 609 P. 2d 520, 524 (1980).		
Arizona *Consumer Fraud Act*	The attorney general has the right to enforce the Consumer Fraud Act. Private right of action for	Class actions permitted.	**One year from discovery of violation.**	Actual damage or injury required.		**Reliance required**, but it need not be reasonable; proximate causation of injury	Prohibits the use or employment of any deception, deceptive act or practice, fraud, false pretense, false promise,	**Wrongful concealment must be "intent that others rely."** However, specific	**Permits compensatory damages; however no statutory damages in private actions; punitive damages if**	Requires: an enrichment, an impoverishment, connection between enrichment and	

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
Ariz. Rev. Stat. Ann. §§44-1521, *et seq.*	injured individuals.					also required.	misrepresentation, or concealment of **a material fact.**	intent not required - intent to do the act is sufficient.	**violation is wanton, reckless or involves spite or ill will; and attorney's fees if fraud claim arises out of contract (court has discretion).**	impoverishment, absence of justification for enrichment and impoverishment, and absence of remedy provided by law. **Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain, or unjust enrichment claim requires that plaintiff lacks a legal remedy.**	
			Ariz. Rev. Stat. Ann. § 12-541(5)				Ariz. Rev. Stat. Ann. § 44-1522(A)	Ariz. Rev. Stat. Ann. § 44-1522(A)	Ariz. Rev. Stat. Ann. § 12-341.01(A)		
	Sellinger v. Freeway Mobile Home Sales, Inc.,521 P.2d 1119, 1122 (1974); *Haisch v. Allstate Ins. Co.*, 5 P.3d 940, 944 (Ariz. Ct. App. 1994).	*Sellinger v. Freeway Mobile Home Sales, Inc.*,521 P.2d 1119, 1122 (1974); *Haisch v. Allstate Ins. Co.*, 5 P.3d 940, 944 (Ariz. Ct. App. 1994).	*Murry v. W. Am. Mortg. Co.*, 604 P.2d 651, 654 (Ariz. Ct. App. 1979); *Alaface v. Nat'l Inv. Co.*,892 P.2d 1375, 1381 (Ariz. Ct. App. 1994).	*Holeman v. Neils*, 803F.Supp. 237, 242 (D. Ariz.1992); *Nataros v. Fine Arts Gallery of Scottsdale, Inc.*, 612P.2d 500, 504 (Ariz. Ct. App. 1980).		*Winkler v. DTE, Inc.*, 205 F.R.D. 235, 242 (D. Ariz. 2001); *Holeman v. Neils*,803 F. Supp. 237, 242 (D. Ariz. 1992); *Kuehn v. Stanley*, 91 P.3d 346, 351 (Ariz. Ct. App. 2004); *Dunpal v. Jimmy GMC of Tuscon, Inc.*, 666 P.2d 83,87 (Ariz. Ct. App. 1983);*Peery v. Hansen*, 585 P.2d 574, 578 (Ariz. Ct. App.1978).		*Flagstaff Med. Ctr., Inc. v. Sullivan*, 773 F. Supp.1325, 1361-62 (D. Ariz.1991), *aff'd in part, rev'd in part by* 962 F.2d 879 (9th Cir. 1992); *Alaface v. Nat'l Inv., Co.*, 892P.2d 1375, 1380 (Ariz. Ct. App. 1994); *Cearley v. Wieser*, 727 P.2d 346,348 (Ariz. Ct. App. 1986); *State v. Goodyear Tire & Rubber Co.*, 626 P.2d1115, 1118 (Ariz. Ct. App. 1981).	*Howell v. Midway Holdings, Inc.*, 362 F. Supp. 2d 1158,1165 (D. Ariz. 2005); *Holeman v. Neils*, 803 F. Supp. 237, 242-43 (D. Ariz. 1992); *Linthicum v. Nationwide Life Ins. Co.*,723 P.2d 675, 680 (1986); *Bennett v. Appaloosa Horse Club*, 35 P.3d 426, 432 (Ariz. Ct. App. 2001); *Nataros v. Fine Arts Gallery ofScottsdale, Inc.*, 612 P.2d 500,504 (Ariz. Ct. App. 1980);*Peery v. Hansen*, 585 P.2d574, 578 (Ariz. Ct. App. 1978) .	*Cmty. Guardian Bank v. Hamlin*, 182 Ariz. 627, 898 P.2d 1005 (Ct. App. 1995), corrected (July 10, 1995)(pleading requirements; *Brooks v. Valley Nat'l Bank*, 548 P.2d 1166, 1171 (Ariz. 1976) (affirming dismissal of unjust enrichment claims where plaintiff received the benefit of the bargain); *US Life Title Co. of Ariz. v. Gutkin*, 732 P.2d 579, 585 (Ariz. Ct. App. 1986); *Trustmark Ins. Co. v. Bank One, Arizona, NA*, 48 P.3d 485, 491 (Ariz. Ct. App. 2002) ("To establish a claim for unjust enrichment, a party must show . . . the absence of a legal remedy.").	
Arkansas *Deceptive Trade Practices Act* Ark. Code. Ann §§ 4-88-101, *et seq.*	The attorney general may bring an action. Private right of action for any person actually injured; private right of action for enhanced penalties only for elderly and disabled persons.	Class actions permitted.	**Five years from the violation.**	Actual damage or injury required.		Right of action requires actual damage or injury incurred as a result of a violation of the act.	Prohibits acts, use, or employment by any person of any deception, fraud, or false pretense or concealment of **a material fact.**	Prohibits making knowingly false representations of benefits of product; prohibits act, use, or employment by any person of any deception, fraud, or false pretense or concealment with intent that others reply.	**Allows only compensatory damages and reasonable attorney's fees; however, allows for punitive damages for elderly and disabled persons**.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	Ark. Code Ann. §§ 4-88-113(f), 4-88-204		Ark. Code Ann. § 4-88-115 (2015).	Ark. Code Ann. §§ 4-88-113(f), 4-88-204.		Ark. Code. Ann. § 4-88-113(f)	Ark. Code. Ann. § 4-88-108(2)	Ark. Code Ann. §§ 4-88-107(a)(1), 4-88-108(2)	Ark. Code Ann. §§ 4-88-113(f)& 4-88-204		
		Lenders Title Co. V. Chandler, 186 S.W.3d 695, 702-04 (2004).								*Frein v. Windsor Weeping Mary LP*, 2009 Ark. App. 774, at *7-8 (Ark. Ct. App. 2009).	
California (I) *Consumers Legal Remedy Act* Cal. Civ. Code §§ 1750, *et seq.*	Private right of action permitted, but limited to consumers who purchased product for personal, family or household purposes.	Class action permitted.	**Three years from date of improper practice.**	Requires some showing of "any damage".		**Causation required** as damages must be "as a result" of the unlawful practice. **Reliance required** where claim is based on fraudulent conduct; only permits a classwide inference of causation and reliance where a single, material misrepresentation was made directly to *each* class member.	**Materiality required.** A misrepresentation is material if "it induced the plaintiff to alter his position to his detriment. Stated in terms of reliance, materiality means that without the misrepresentation, the plaintiff would not have acted as he did. It must be shown that the plaintiff actually relied upon the misrepresentation; i.e., that the representation was 'an immediate cause of his conduct which alters his legal relations' and that without such representations, he would not, in all reasonable probability, have entered into the contract or other transaction.'"	No scienter requirement; however, violation must be intentional to receive damages.	Greater of actual damages or$1,000 in a class action; injunctive relief permitted; prejudgment interest allowed; **punitive damages allowed**; attorney's fees available.		**Requires 30 day pre-suit notice and opportunity to cure.**
	Cal. Civ. Code §§ 1761(d), 1780, 1781	Cal. Civ. Code §§ 1780,1781	Cal. Civ. Code § 1783	Cal. Civ. Code § 1780(a)		Cal. Civ. Code § 1780(a)		Cal. Civ. Code §§1770(a), 1784	Cal. Civ. Code §§ 1780(a), 1780(c), 1780(e)		Cal. Civ. Code § 1782
						Gonzalez v. Proctor & Gamble Co., 247 F.R.D. 616, 624-25 (S.D. Cal.2007); *Vasquez v. Sup. Ct.*,4 Cal. 3d 800, 814 (1971); *Buckland v. Threshold Enters., Ltd.*, 155 Cal. App.4th 798, 811 (Cal. Ct. App.2008); *Caro v. Proctor & Gamble Co.*, 18 Cal. App.4th 644, 668-69 (Cal. Ct. App. 1993).	*Caro v. Procter & Gamble Co.*, 18 Cal. App. 4th 644, 667 (Cal. Ct. App.1993); *Lacher v. Sup. Ct.*, 230 Cal. App. 3d 1038, 1049 (Cal. Ct. App.1991).				
California (II) *Unfair Competition Law* Cal. Bus. & Prof.	The attorney general, district attorneys, and city and county counsel may bring actions to enforce. Private right of action	Class certification required for private claims.	**Four years from accrual of action; three years for false advertising claims**.	Actual injury required.	Only permits a classwide inference of causation where single, material misrepresentatio	Plaintiff must establish **causation and actual reliance** in accordance with principles of ordinary fraud actions.	**Materiality required;** duty to disclose required for omission based claim.	No mens rea requirement under the Unfair Competition Law.	**No civil damages in private cause of action. Damages not permitted, only equitable relief including restitution.**	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Allows claim to be based on "unfair" conduct, but California courts have not reached a consensus on the standard of

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Code.§§ 17200 *et seq.*	permitted for those injured as a result of defendant's conduct.				n was directly made to each class member. For a fraud prong claim under the UCL based on an alleged misrepresentation in a long-term advertising campaign, the misrepresentation must have been material.				**No attorney's fees, unless available through contract or other statute.**	Unjust enrichment is not a standalone cause of action.	"unfairness" to be used in consumer actions.
	Cal. Bus. & Prof. Code §§ 17203, 17204	Cal. Bus. & Prof. Code §§ 17203, 17204	Cal. Bus. & Prof. Code §17208; Cal. Civ. Proc. Code §§ 338(a), 338(h)	Cal. Bus. & Prof. Code §§ 17203, 17204					Cal. Bus. & Prof. Code §§ 17203, 17205, 17206	*Melchior v. New Line Prods., Inc.,* 106 Cal. App. 4th 779, 792 (2003); *McKell v. Wash. Mut., Inc.,* 142 Cal. App. 4th 1457, 1490 (2006); *Brazil v. Dell Inc.*, No. C–07–01700 RMW, 2010 WL 5258060, * 4 (N.D. Cal. Dec. 21, 2010); *Levine v. Blue Shield of Cal.*, 189 Cal. App. 4th 1117, 1138 (2010)	
	Arias v. Super. Ct., 46 Cal. 4th 969, 975 (2009); *Californian's for Disability Rights v. Mervyn's, LLC,* 39 Cal.4th 223, 227, 233 n.4 (2006); *Hall v. Time, Inc.*, 158 Cal.App.4th 847, 852 (2008)				*Gonzalez v. Procter & Gamble Co.,* 247 F.R.D. 616, 624-26 (S.D. Cal. 2007); *In re Tobacco II Cases,* 46 Cal. 4th 298, 326-27 (2009); *Vasquez v. Sup. Ct.,* 4 Cal. 3d 800,814 (1971); *Caro v. Proctor & Gamble Co.,*18 Cal. App. 4th 644, 668-69 (Cal. Ct. App. 1993).	*In re Tobacco II Cases,* 46 Cal. 4th 298, 306 (2009) (holding that private plaintiffs must demonstrate "actual reliance . . . in accordance with well-settled principles regarding the element of reliance in ordinary fraud actions.")	*Berryman v. Merit Prop. Mgmt., Inc.*, 152 Cal. App. 4th 1544, 1556-57 (Cal. Ct. App. 2007); *Daugherty v. Am. Honda Motor Co, Inc.,* 144 Cal. App.4th 824, 839 (Cal. Ct. App. 2006); *Caro v. Procter & Gamble Co.,* 18 Cal. App. 4th 644, 667 (Cal. Ct. App.1993).	*In re Tobacco II Cases,* 46 Cal. 4th 298, 306 (2009); *State Farm Fire& Cas. Co. v. Sup. Ct.,* 45Cal. App. 4th 1093, 1105 (Cal. Ct. App. 1996).	*Korea Supply v. Lockheed Martin Corp.,* 29 Cal. 4th1134, 1144 (2003).	*Peterson v. Cellco P'ship,* 164 Cal. App. 4th 1583 (4th Dist. 2008) (holding that the trial court properly sustained defendant's demurrer to plaintiffs' unjust enrichment claim because plaintiffs received the benefit of the bargain)	*See generally Bardin v. Daimler-Chrysler Corp.,* 136Cal. App. 4th 1255, 1265-74 (Cal. Ct. App. 2006) (applying several definitions of "unfair" to affirm dismissal of unfair competition claim and urging CA legislature and Supreme Court to clarify correct formulation governing consumer cases.)
California (III) *False Advertising Law* Cal. Bus. & Prof. Code§§ 17500, *et seq.*	Permits any person acting for the interests of itself, its members, or the general public, to initiate an action for restitutionary and/or injunctive relief against a person or business entity who has engaged in any unlawful, unfair, or fraudulent business actor practice or unfair, deceptive,	Class certification required for private claims.	**3 years for false advertising claims.**	Consumers must allege that they suffered damages as a result of the use or employment by any person of a method, act, or practice declared to be unlawful pursuant to the statute. The court may order relief without individualized proof of deception, injury, and reliance if it		The statute affords protection against the probability or likelihood as well as the **actuality of deception or confusion.** Consumers allege that they suffered **actual damage as a result** of the defendant's actions.	An inference of reliance would arise as to an entire class as long as **material misrepresentations** were made to the class members. **Materiality** is generally judged by a reasonable person standard, meaning that a misrepresentation is deemed material if a reasonable person would attach importance to its existence or nonexistence in determining his choice of	A violation of this statute may be committed without any specific intent. "Any statement which is deceptive or merely misleading, without intent to deceive, violates the statute."	**Private individuals who bring suit are limited to restitution and equitable relief.** Public officers can seek civil penalties capped at $2,500 per violation. The Attorney General has only one cause of action against a particular defendant for violating this		

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	untrue, or misleading advertising of any act prohibited by Chapter 1 (commencing with Cal. Bus. & Prof. Code § 17500).			determines that such a remedy is necessary to prevent the use or employment of the unfair practice.			action in the transaction in question.		section, but the amount of civil penalties which may be imposed is dependent upon the number of violations committed. Public officers can seek civil penalties capped at $6,000 per violation for violating injunctions granted by the act.		
			Cal. Bus. & Prof. Code §17500; Cal. Civ. Proc. Code §§ 338(a), 338(h)						Cal. Bus. & Prof. Code §§ 17535.5, 17536		
	Rosales v. Citibank, 133F. Supp. 2d 1177, 1182 (N.D. Cal. 2001).	*Cole v. Asurion Corp* .,267 F.R.D. 322, 331 (C.D. Cal. 2010).		*In re Toyota Motor Corp.*, 790 F. Supp. 2d1152, 1169-70 (C.D. Cal.2011); *People v. Dollar Rent-A Car Sys.*, 211 Cal. App. 3d 119, 129-31(Cal. Ct. App. 1989).		In re Toyota Motor Corp.,790 F. Supp. 2d 1152, 1169-70 (C.D. Cal. 2011); *People v. Toomey*, 157 Cal. App.3d 1, 18 (Cal. Ct. App.1984).	*In re Toyota Motor Corp.*, 790 F. Supp. 2d 1152, 1169-70 (C.D. Cal. 2011).	*People ex rel. Mosk v. Lynam,* 253 Cal. App. 2d959, 966 (Cal. Ct. App.1967); *People v. Wahl,*39 Cal. App. 2d Supp.771, 773 (Cal. App. Dep't Sup. Ct. 1940).	*Rosales v. Citibank,* 133 F. Supp. 2d 1177, 1182 (N.D. Cal.2001); *Chern v. Bank of America,* 15 Cal. 3d 866, 876 (1976); *People ex rel. Mosk v. Lynam,* 253 Cal. App. 2d 959,966 (Cal. Ct. App. 1967).		
Colorado *Consumer Protection Act* Colo. Rev. Stat. Ann.§§ 6-1-101, *et seq.*	The attorney general and the district attorneys have the power to enforce the Act. Private right of action available too.	Class actions permitted.	**Three years from violation** (last instance), plus one year if defendant caused the delay.	Requires injury in fact, caused by the challenged practice.		False representation must induce party to act, refrain from acting, or have the capacity or tendency to attract consumers.	Prohibits concealment of **material information** concerning goods if such a failure to disclose was intended to induce the consumer to enter into a transaction.	Certain violations-including falsely representing benefits of a product-must be made knowingly.	In a class action, only actual damages are permitted. In an individual action, there is a statutory minimum of $500; prejudgment interest is allowed; punitive damages allowed up to three times actual damages. Reasonable attorney's fees are allowed.		Plaintiffs must demonstrate alleged deceptive practice significantly impacts the public as actual or potential customers. If claims are groundless or otherwise improper then plaintiff is liable for defendant's fees and costs.
	Colo. Rev. Stat. Ann. §§ 6-1-103, 6-1-105, 6-1-113	Colo. Rev. Stat. Ann. § 6-1-113	Colo. Rev. Stat. Ann. § 6-1-115	Colo. Rev. Stat. Ann. § 6-1-113(1)(a)			Colo. Rev. Stat. Ann. § 6-1-105(1)(u)	Colo. Rev. Stat. Ann. §§ 6-1-105(1)(e),(g),(u)	Colo. Rev. Stat. Ann. §§ 6-1-113(1)(a), 6-1-113(2), 6-1-113(2)(a), 6-1-113(3)		Colo. Rev. Stat. Ann. §6-1-113(3)
	Coors v. Sec. Life of Denver Ins. Co., 112 P.3d 59, 63-64 (2005); *Rhino Linings USA, Inc. v. Rocky Mountain Rhino Lining, Inc.*, 62 P.3d 142, 146-47 (2003).		*Robinson v. Lynmar Racquet Club, Inc.*, 851 P.2d 274, 281 (Colo. Ct. App. 1993).	*Hall v. Walter,* 969 P.2d 224, 235 (1998).		*Rhino Linings USA, Inc. v. Rocky Mountain Rhino Lining, Inc.*, 62 P.3d. 142,147-48 (2003).			*Lexton-Ancira Real Estate Fund, 1972 v. Haller,* 826 P.2d 819, 822-24 (1992).		*Hall v. Walter,* 969 P.2d 224, 235 (1998).
Connecticut *Unfair Trade Practices Act* Conn. Gen. Stat. Ann.§§ 42-110a, *et*	Private right of action.	Class permitted only on behalf of Connecticut residents or individuals injured in Connecticut.	**Three years after the violation occurred.**	Requires ascertainable loss of money for private right of action.		**Reliance not required**.	**Materiality not required** because misrepresentation need not be part of the basis for the bargain.	Not required.	Permits actual and injunctive relief; punitive damages and attorney's fees within the discretion of the court (dependent upon proof of reckless		No jury trial right.

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seq.									indifference to the rights of others or an intentional or wanton violation of those rights).		
	Conn. Gen. Stat. Ann. §42-110g(b)	Conn. Gen. Stat. Ann. §42-110g(b)	Conn. Gen. Stat. Ann. §42-110g(f)	Conn. Gen. Stat. Ann. §42-110g(a)					Conn. Gen. Stat. Ann. §§ 42-110g(a), 42-110g(d)		
						Izzarelli v. R.J. Reynolds Tobacco Co., 117 F.Supp.2d 167, 176 (D. Conn.2000); *Solomon v. WMN Assocs., Inc.*, 1994 WL 597390, at *6 (Conn. Super. Ct. Oct. 20, 1994).	*Izzarelli v. R.J. Reynolds Tobacco Co.*, 117 F.Supp. 2d 167, 176 (D. Conn.2000).	*Cheshire Mortg. Serv., Inc. v. Montes*, 612 A.2d 1130, 1144 (Conn. 1992); *Calandro v. Allstate Ins. Co.*, 778 A.2d 212, 221 (Conn. App. Ct. 2001); *Muntz v. Kraus*, 757 A.2d 1207,1214 (Conn. App. Ct.2000).	*Gargano v. Heyman*, 525 A.2d 1343, 1347 (1987).		*Assoc. Invest. Co., v. Williams Assocs.*, 645 A.2d 505, 512 (1994).
Delaware *Consumer Fraud Act* Del. Code. Ann. tit. 6,§§ 2511, *et seq.*	Private right of action allowed. Attorney general may also enforce the act.	Class action permitted to any victim of a violation of Subchapter II.	**Three years from discovery of violation.**	**Neither deception nor injury is required elements under the act.** However, monetary recovery is based on damages.	**Neither deception nor injury is required elements under the act.** However, monetary recovery is based on damages.	**Reliance not required**.	Prohibits concealment of a **material fact** with the intent that others would rely on that concealment.	Neither intent to make a deceptive or untrue statement, nor intent to induce reliance required, however some concealment claims require intent that others rely on the concealment at issue.	Actual damages allowed; punitive damages allowed only in cases where compensatory damages are available and where the fraud was gross, oppressive, and aggravated or involves a breach of a trust or confidence. Injunctive relief permitted.	Unjust enrichment requires (1) an enrichment; (2) an impoverishment; (3) a connection between the enrichment and the impoverishment; (4) an absence of "justification" or "cause" for the enrichment and impoverishment; and (5) the absence of a remedy provided by law. (Same as AZ) SOL for unjust enrichment claims is 3 years.	
	Del. Code. Ann. tit. 6, §§2525, 2532, 2533 .		Del. Code Ann. tit. 10, §8106 (any action for statutory damages).	Del. Code Ann. tit. 6, §2513(a)	Del. Code Ann. tit. 6, §2513(a)		Del. Code Ann. Tit. 6, § 2513(a)	Del. Code. Ann. tit 6, §2513(a)	Del. Code Ann. tit 6, §§ 2523, 2583	*Jackson Nat'l Life Ins. Co. v. Kennedy*, 741 A.2d 377, 393-94 (Del. Ch. 1999).	
		Spark v. MBNA Corp.,157 F. Supp. 2d 330, 333 (D. Del. 2001).	*Pender v. DaimlerChrysler Corp.*, No. 03-12022, 2004 WL 2191030, at *1 (Del. Sup. Ct. July 30, 2004); *Pack & Process, Inc. v. Celotex Corp.*, 503 A.2d 646, 650 (Del. Super. Ct. 1985).	*Crosse v. BCBSD, Inc.*, 836 A.2d 492, 487 (2003); *Stephenson v. Capano Dev. Inc.*, 462 A.2d 1069, 1077 (1983).	*Crosse v. BCBSD, Inc.*, 836 A.2d 492, 487 (2003); *Stephenson v. Capano Dev. Inc.*, 462 A.2d 1069, 1077 (1983).	*Stephenson v. Capano Dev. Inc.*, 462 A.2d 1069, 1074 (1983); *S & R Assocs. v. Shell Oil Co.*, 725 A.2d 431,440 (Del. Super. Ct. 1998); *Pack & Process, Inc. v. Celotex Corp.*, 503 A.2d 646, 657 (Del. Super. Ct.1985).	*Brandywine Volkswagen, Ltd. V. State*, 312 A.2d 632, 633 (1973).	*Stephenson v. Capano Dev. Inc.*, 462 A.2d 1069,1074 (1983); *Pack & Process, Inc. v. Celotex Corp.*, 503 A.2d 646, 657 (Del. Super. Ct. 1985).	*Stephenson v. Capano Dev. Inc.*, 462 A.2d 1069, 1077 (1983).		
District of Columbia *Consumer*	Private right of action - any person whether acting on behalf of himself or	Class actions permitted.	**Three years.**	**No actual deception or damage required**. A merchant may	**A merchant may violate the act whether or not any deception**		**Misrepresentation must be material** and have tendency to mislead.	Not settled.	Once a consumer shows damages, the consumer may receive treble damages	Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.	

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Protection Procedures Act D.C. Code §§ 28-3901,*et seq.*	the general public may bring an action to enforce the Act.			violate the act whether or not any consumer is in fact misled, deceived or damaged thereby. However, the district courts have standing requirements identical to those in Article III, requiring plaintiffs to suffer actual injury.	**actually takes place** - "whether or not any consumer is in fact misled, deceived or damaged thereby."				or$1,500 per violation, whichever is greater; attorney's fees; punitive damages in cases of outrageous or egregious wrongdoing proven "by clear and convincing evidence"; and an injunction.		
	D.C. Code § 28-3905(k)(1)		D.C. Code § 12-301(8)	D.C. Code § 28-3904	D.C. Code § 28-3904		D.C. Code § 28-3904(e)		D.C. Code § 28-3905(k)(1)		
		Margolis v. U-Haul Int'l, Inc., No. 07-5245, 2009 D.C. Super. LEXIS 8, at *4 (D.C. Super. Ct. 2009)							*District Cablevision Ltd. P'ship v. Bassin*, 828 A.2d 714, 725-26 728 (2003).	*Dahlgren v. Audiovox Commc'ns Corp.*, No. 2002 CA 007884 B, 2012 WL 2131937 (D.C. Super. Ct. March 15, 2012) (plaintiffs who receive the benefit of the bargain are not entitled to restitution).	
Florida *Deceptive and Unfair Trade Practices Act* Fla. Stat. Ann. §§501.201, *et seq.*	Private right of action for anyone aggrieved by a violation of the act or anyone who has suffered a loss as a result of a violation of the Act.	Class actions permitted.	**Four years.**	To recover damages, must show "actual damages" as a result of violation. However, right of action granted "without regard to any other remedy or relief to which a person is entitled, anyone aggrieved by a violation."		Reliance and causation not required.	Not required.	Not required; however, must show that conduct is likely to mislead reasonable customers.	Actual damages plus attorney's fees and costs; equitable relief available. Any party who is proven to have brought a frivolous, legally or factually meritless claim or claim for the purpose of harassment may be required to post bond in the amount which the court finds reasonable to indemnify the defendant for any damages incurred, including reasonable attorney's fees.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain, or if defendant has provided consideration for the benefit received. Unjust enrichment claim requires that plaintiff lack a legal remedy.**	Plaintiff must allege that violation of the Act occurred in Florida.
	Fla. Stat. Ann. § 501.211	Fla. Stat. Ann. § 501.211	Fla. Stat. Ann. § 95.11.(3)(f)	Fla. Stat. Ann § 501.211(2)					Fla. Stat. Ann. §§ 501.211, 501.211(3)		
	Martinez v. Rick Case Cars, Inc., 278 F. Supp.2d 1371, 1373 (S.D. Fla.2003); *PNR, Inc. v. Beacon Prop. Mgmt.,Inc.*, 842 So. 2d 773, 777 (2003).	Barnhill v. Fla. Microsoft Anti-Trust Litig., 905 So.2d 195, 197 (Fla. Dist. Ct. App. 2005).		*Fitzpatrick v. Gen. Mills, Inc.*, 263 F.R.D. 687, 695 (S.D. Fla. 2010) (citing *Rollins, Inc. v. Butland*,951 So. 2d 860, 869 (Fla. Dist. Ct. App. 2006)).		*Davis v. Powertel, Inc.*, 776So. 2d 971, 973-74 (Fla. Dist. Ct. App. 2000); *Latman v. Costa Cruise Lines N.V.*, 758 So. 2d 699,703 (Fla. Dist. Ct. App.2000).	*Davis v. Powertel, Inc.*, 776 So. 2d971, 973-74 (Fla. Dist. Ct. App. 2000).	*Davis v. Powertel, Inc.*,776 So. 2d 971, 973-74 (Fla. Dist. Ct. App. 2000); *W.S. Badcock Corp. v. Myers*, 696 So. 2d 776,779 (Fla. Dist. Ct. App.1996).		*Prohias v. Pfizer, Inc.*, 485 F. Supp. 2d 1329, 1335 (S.D. Fla. 2007)); *Am. Safety Ins. Serv., Inc. v. Griggs*, 959 So. 2d 322, 331-32 (Fla. Dist. Ct. App. 2007). *Commerce P'ship 8098 Ltd. P'ship v. Equity Contracting Co.*, 695 So. 2d 383, 390 (Fla. Dist.	*Amar Shakti Enters., LLC v. Wyndham Worldwide, Inc.*, No. 10-1857, 2011 WL3687855, at *3 (M.D. Fla. Aug. 22, 2011).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
										Ct. App. 1997);*Am. Safety Ins. Serv., Inc. v. Griggs*, 959 So. 2d 322, 331-32 (Fla. Dist. Ct. App. 2007); *Am. Honda Motor Co. v. Motorcycle Info. Network, Inc.*, 390 F. Supp. 2d 1170, 1178 (M.D. Fla. 2005); *Prohias v. Pfizer, Inc.*, 490 F. Supp. 2d 1228, 1236-37 (S.D. Fla. 2007) .	
Georgia *Uniform Deceptive Trade Practices Act (Ga. Code Ann.* §§ 10-1-370, *et seq.)* *Fair Business Practices Act* (Ga. Code Ann. §§10-1-390, *et seq.*)	Private right of action for injunctive relief under the Uniform Deceptive Trade Practices Act ("UDTPA"). Private right of action, but no class actions under the Fair Business Practices Act ("FBPA").	Prohibited under the FBPA.	**Four years from discovery under the UDTPA.** Two years from discovery under the FBPA.	Must establish likely to be damaged under the UDTPA. FBPA requires injury or damages.		Reliance not required under the UDTPA. Reliance and causation required under the FBPA.	Misrepresentation must cause a likelihood of confusion, but need not cause actual confusion under the UDTPA. **Material omissions required** under the FBPA.	Intent to deceive not required under the UDTPA. Neither knowledge of deception nor intent to deceive required under FBPA.	**No civil damages under UDTPA**, including statutory damages; only injunctive relief available; attorney's fees also permitted. FBPA permits recovery of actual damages, injunctive relief, and punitive damages if specific intent is shown; no statutory damages or prejudgment interest. Treble damages may be available if a violation is found to be intentional.		**FBPA requires presuit demand letter**. FBPA requires administrator to be served with complaint and provided an opportunity to be heard in case. FBPA limits "consumers" to natural persons and "consumer transactions" to those involving goods for personal, family, or household purchases.
	Ga. Code Ann. §§ 10-1-373(a), 10-1-399(a)	Ga. Code Ann. § 10-1-399	Ga. Code Ann. §§ 9-3-31,10-1-401(a)	Ga. Code Ann. §§ 10-1-373, 10-1-399		Ga. Code Ann. §§ 10-1-372(b), 10-1-399(a)		Ga. Code Ann. § 10-1-373	Ga. Code Ann. §§ 10-1-373(a),10-1-373(b), 10-1-373(c), 10-1-399(a), 10-1-399(c)		Ga. Code Ann. §§ 10-1-392(a)(6), 10-1-392(a)(10),10-1-399(b), 10-1-399(g)
			Kason Indus. Inc. v. Component Hardware Group, Inc., 120 F.3d 1199, 1204-05 (11th Cir. 1997).	*Kason Indus., Inc. v. Component Hardware Group, Inc.*, 120 F.3d 1199, 1200 (11th Cir.1997); *Regency Nissan, Inc. v. Taylor*, 391 S.E.2d 467, 470 (Ga. Ct. App.1990).		*Baranco, Inc. v. Bradshaw*,456 S.E.2d 592, 594 (Ga. Ct. App. 1995); *Regency Nissan, Inc. v. Taylor*, 391S.E.2d 467, 470 (Ga. Ct. App. 1990); *Zeeman v. Black*, 273 S.E.2d 910, 916 (Ga. Ct. App. 1980).	*Looney v. M-Squared, Inc.*, 586 S.E.2d 44, 50-51 (Ga. Ct. App. 2003); *Regency Nissan, Inc. v. Taylor*, 391S.E.2d 467, 470 (Ga. Ct. App. 1990).	*Henderson v. Gandy*, 608 S.E.2d 248, 252 (Ga. Ct. App. 2004); *Regency Nissan, Inc. v. Taylor*,391 S.E.2d 467, 470 (Ga. Ct. App. 1990).	*Moore v. Davis Motors, Inc. v. Joyner*, 556 S.E.2d 137, 140 (2001); *Catrett v. Landmark Dodge, Inc.*, 560 S.E.2d 101 (Ga. Ct. App. 2002); *Conseco Fin. Serv. Corp. v. Hill*, 556 S.E.2d 468, 473 (Ga. Ct. App.2001).		
Hawaii *Unfair Practices Act* Haw. Rev. Stat. §§ 480-1, *et seq.*	The attorney general or the director of the Office of Consumer Protection may bring an action. Also, private right of action permitted. Right of action limited to consumers, defined as natural persons.	Class action permitted.	**Four years from discovery.**	Suit for damages requires private damage. Monetary damage not required to obtain injunctive relief. Actual confusion or misunderstanding not required.		In a suit for damages, violation must "cause" actual damage.	**Materiality required.** A deceptive act or practice is: (1) a representation, omission, or practice; that (2) is likely to mislead consumers acting reasonably under the circumstances where; (3) the representation, omissions, or practice is material. A	Intent not required for damages or for injunctive relief.	**A sum not less than $1,000 or three times actual damages, whichever is greater, unless plaintiff is an "elder" in which case it is the greater of $5,000 or three times damages; injunctive relief available;**	Unjust enrichment claim requires that plaintiff lacks a legal remedy.	

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
							representation, omission or practice is **considered "material" if it involves information that is important to the consumer and, hence, likely to affect their choice of, or conduct regarding, a product.** Moreover, the ...test is an objective one, turning on whether the act or omission is likely to mislead consumers, as to information important to the consumers, in making a decision regarding the product or service.		**attorney's fees mandatory. In class actions, only compensatory damages are awarded; $1,000 minimum does not apply.**		
	Haw. Rev. Stat. Ann. §§ 480-1, 480-2, 480-13	Haw. Rev. Stat. Ann. §§480-1, 480-13	Haw. Rev. Stat. Ann. §480-24	Haw. Rev. Stat. Ann. §§ 480-13, 481A-4, 481A-3(b)		Haw. Rev. Stat. Ann. § 480-13		Haw. Rev. Stat. Ann. §§ 480A-4, 480-2	Haw. Rev. Stat. Ann. §§ 480-13, 480-13(c)(1)		
	Leibert v. Fin. Factors, Ltd., 788 P.2d 833, 837-38 (1990); *Hunt v. FirstIns. Co. of Haw.*, 922P.2d 976, 985-86 (Haw. Ct. App. 1996); *Beerman v. Toro Mfg. Corp.*, 615P.2d 749, 754 (Haw. Ct. App. 1980).		*Leibert v. Fin. Factors, Ltd.*, 788 P.2d 833, 837-38 (1990).	*Sambor v. Omnia Credit Servs., Inc.*, 183 F.Supp.2d 1234, 1244 (D. Haw.2002); *Davis v. Wholesale Motors*, 949P.2d 1026, 1038 (Haw. Ct. App. 1997) (elements for recovery under § 480-13(b)(1) are: (1) a violation of § 480-2; (2) injury to the consumer caused by such violation; and (3) proof of the amount of damages).		*Sambor v. Omnia Credit Servs., Inc.*, 183 F.Supp 2d1234, 1244 (D. Haw. 2002).	*Courbat v. Dahana Ranch, Inc.*, 111 Haw. 254, 262 (Haw. 2006)	*Davis v. Wholesale Motors*, 949 P.2d 1026, 1038 n.15 (Haw. Ct. App.1997).	*Cieri v. Leticia Query Realty, Inc.*, 905 P.2d 29 (1995); *Liebert v. Fin Factors, Ltd.*,788 P.2d 833 (1990); *Eastern Star, Inc. v. Union Bldg. Materials Corp.*, 712 P.2d 1148, 1151 (1985).	*Porter v. Hu*, 169 P.3d 994, 1006-07 (Haw. Ct. App. 2007); *Davis v. Four Seasons Hotel Ltd.*, No. 08-00525, 2011 WL 5025521, at *6 (D. Haw. Oct. 20, 2011) ("Hawaii courts observe the principle that equitable remedies, like unjust enrichment, are only available when legal remedies are inadequate.").	
Idaho *Consumer Protection Act* Idaho Code Ann. §§ 48-601, *et seq.*	Private right of action permitted.	Class action permitted.	**Two years from discovery.**	Requires "ascertainable loss" for private right of action.	"Actual deception" not required; tendency to deceive is enough.	Requires ascertainable loss incurred as a result of violation.	**Material omissions required**.	Knowledge of falsity required for affirmative representations.	In an individual action, greater of actual damages or$1,000 and punitive damages if "repeated" or "flagrant;" prejudgment interest and injunctive relief available. Statutory minimum of damages of $1,000 must be entered if elements of statute are established. Mandatory attorneys' fees for prevailing plaintiff. Discretionary to defendant. Class action damages limited to "actual damages" or "a total for the class that may not exceed $1,000, whichever is greater.		An action brought by an elderly or disabled person shall also recover from the offending party an enhanced penalty of$15,000 or treble the actual damages, whichever is greater.
	Idaho Code Ann. §	Idaho Code Ann.	Idaho Code Ann. §	Idaho Code Ann. § 48-		Idaho Code Ann. §		Idaho Code Ann. §	Idaho Code Ann. §§ 48-		Idaho Code Ann. §

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	48-608	§ 48-608	48-619	608		48-608		48-603	608(1), 48-608(5)		48-608(2)
				In re Wiggins, 273 B.R.839, 856-57 (Bankr. D. Idaho 2001); *Yellowpine Water Users' Ass'n v. Imel*, 670 P.2d 54, 56-57(1983); *Jackson v. Wood*, 859 P.2d 378, 380 (Idaho Ct. App. 1993).	*State ex rel. Kidwell v. Master Distribs., Inc.*,615 P.2d 116, 122-23 (1980).	*Jackson v. Wood,*, 859 P.2d 378, 380 (Idaho Ct. App.1993).	*State ex rel. Kidwell v. Master Distribs., Inc.,* 615 P.2d 116, 122-23 (Idaho 1980).	*State ex rel. Kidwell v. Master Distribs., Inc.*,615 P.2d 116, 122-23 (Idaho 1980).	*In re. Wiggins,* 273 B.R. 839, 881-82 (Bankr. D. Idaho2001); Fenn v. Noah, 133 P.3d 1240, 1244-45 (2006); Israel v. Leachman, 72 P.3d 864 (2003); *Mac Tools, Inc. v. Griffin*, 126 Idaho 193, 196-98 (1994); *Nalen v. Jenkins*, 741 P.2d 366 (Idaho 1987).		
Illinois *Consumer Fraud and Deceptive Business Practice Act* 818 Ill. Comp. Stat. 5051/1, *et seq.*	Private right of action permitted, but applies only to fraudulent transactions which take place "primarily and substantially" in Illinois.	Class action permitted, but applies only to fraudulent transactions which take place "primarily and substantially" in Illinois.	**Three years from discovery.**	Actual injury required.	**Actual deception required.**	**Proximate causation required**. The deception must occur in the course of conduct involving trade and commerce and proximately cause the damage.	Unfair methods of competition and unfair or deceptive acts or practices, including but not limited to the use or employment of any deception, fraud, false pretense, false promise, misrepresentation or the concealment, suppression or **omission of any material facts,** with intent that others reply upon the concealment, suppression or omission of such material fact or the use or employment of any practice described in Section 2 of the "Uniform Deceptive Trade Practices Act," approved August 5, 1965 [815ILCS 510/2], in the conduct of any trade or commerce are hereby declared unlawful whether any person has in fact been misled, deceived or damaged thereby.	Intent to deceive is not required, but intent that consumer rely on the information is required.	**Statutory and compensatory damages permitted. Statute does allow for punitive damages under "other relief" provision.** Grounds for relief must be alleged, including fraud, malice, or gross negligence indicating wanton disregard for the rights of others. Injunctive relief permitted. Attorneys' fees permitted.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Jury trial right does not exist in state court in certain cases.
	815 Ill. Comp. Stat. Ann.505/10a	815 Ill. Comp. Stat. Ann.505/10a	815 Ill. Comp. Stat. Ann.505/10a(e)	815 Ill. Comp. Stat. Ann.505/10a	815 Ill. Comp. Stat. Ann.505/10a		815 Ill. Comp. Stat. Ann. 505/2		815 Ill. Comp. Stat. Ann.505/2AA, 2S, 2W, 7, 10a		
	Barbara's Sales, Inc. v. Intel Corp., 227 Ill.2d 45,60 (2007); *Avery v. State Farm Mutt. Auto Ins., Co.*,835 N.E.2d 801, 849-50 (2005).	*Barbara's Sales, Inc. v. Intel Corp.*, 227 Ill.2d 45,60 (2007); *Avery v. State Farm Mutt. Auto Ins., Co.*,835 N.E.2d 801, 849-50 (2005).	*Highsmith v. Chrysler Credit Corp.*, 18 F.3d434, 441 (7th Cir. 1994) (quoting *Knox Coll. v. Celotex Corp.*, 88 Ill. 2d407, 415 (1981)); *Walsh v. Barry-Harlem Corp.*,649 N.E.2d 614, 616 (Ill. Ct. App. 1995).	*Avery v. State Farm Mut. Auto. Ins. Co.* , 216 Ill. 2d 100, 199 (2005); *Oliveira v. Amoco Oil Co.*, 201 Ill. 2d 134, 155 (2002); *Bunting v. Progressive Corp.*, 809 N.E.2d 225, 231 (Ill. App. Ct. 2004).	*Avery v. State Farm Mut. Auto. Ins. Co.* , 216 Ill. 2d 100, 199 (2005); *Oliveira v. Amoco Oil Co.*, 201 Ill. 2d 134, 155 (2002); *Bunting v. Progressive Corp.*, 809 N.E.2d 225, 231 (Ill. App. Ct. 2004).	*Xydakis v. Target* , 333 F.Supp. 2d 686, 688 (N.D. Ill. 2004); *Oliveira v. Amoco Oil Co.*, 776 N.E.2d 151, 164 (2002); *Seigel v. Levy Org. Dev. Co.*, 607 N.E.2d 194, 198 (1992); *Bunting v. Progressive Corp.*, 809 N.W.2d 225, 231 (Ill. App.Ct. 2004).	*Ryan v. Werst Elec. GmbH & Co.*, 59 F.3d 52, 53-54 (7th Cir. 1995).	*Bunting v. Progressive Corp.*, 809 N.E.2d 225, 231 (Ill. App. Ct. 2004); *Griffin v. Universal Cas. Co.* , 654 N.E.2d 694, 700-01 (Ill. App. Ct. 1995);*Smith v. Prime Cable of Chi.*, 658 N.E. 2d 1325, 1335 (Ill. App. Ct. 1992).	*Guess v. Brophy*, 517 N.E.2d 693, 697 (Ill. Ct. App. 1987).	*La Throp v. Bell Fed. Sav. & Loan Ass'n*, 370 N.E.2d 188, 195 (Ill. 1977) (affirming dismissal of an unjust enrichment claim because "[a] person is not entitled to compensation on the grounds of unjust enrichment if he receives . . . that which it was agreed between them the other should give in return" (citing *Brooks*,	*Martin v. Heinold Commodities, Inc.*, 643 N.E.2d 734, 753 (1994).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
										548 P.2d at 1171)).	
Indiana *Deceptive Consumer Sales Act* Ind. Code Ann. §§ 24-5-0.5-1, *et seq.*	Private right of action	Class action permitted.	**Two years from the occurrence of act.**	"Actual damages" required.		**Reliance and proximate causation required.**	Claims are based on **misrepresentation of material fact.** However, the IDCSA, does NOT have "general fraud" category. "The categories of deceptive acts giving rise to liability under the IDCSA are very specifically defined... there is no general 'fraud' category. Compare consumer protection acts in many other states, which either specifically refer to failure to state material facts or include 'catch-all' clauses...the IDCSA contains no such provisions."	"Incurable" deceptive practices require "knowing violation" and "intent to mislead;" most "uncured" deceptive practices require defendant had "[known] or should reasonably have known."	Before 2005 amendment, recovery limited to "damages actually suffered**." After 2005 amendment, damages "actually suffered" or $500, whichever is greater**. Allows attorneys' fees. **Allows damages for a willful deceptive act of three times actual damages or $1,000, whichever is greater.** Injunctive relief and discretionary attorneys' fees available. Prejudgment interest recoverable.		**Requires notice to defendant unless deceptive act is "incurable**. "Money recovered in a class action that cannot be returned to consumers within one year reverts back to the defendant.
	Ind. Code Ann. § 24-5-0.5-4	Ind. Code Ann. § 24-5-0.5-4	Ind. Code Ann. § 24-5-0.5-5(b)	Ind. Code Ann. § 24-5-0.5-4(a)		Ind. Code Ann. § 24-5-0.5-4(a)	Ind. Code Ann. § 24-5-0.5-3(a)		Ind. Code Ann. § 24-5-0.5-4; P.L. 165-2005		Ind. Code Ann. §§ 24-5-0.5-4(b), 24-5-0.5-5
	McKinney v. State, 693N.E.2d 65, 66 (Ind.1998).	*McKinney v. State,* 693N.E.2d 65, 66 (Ind.1998).				*Captain & Co. v. Steinberg,* 505 N.E.2d 88, 98-99 (Ind. Ct. App. 1987).	*McKinney v. State,* 693 N.E.2d 65, 72 (Ind. 1998); *Lawson v. Hale,* 902N.E.2d 267, 274 (Ind. Ct. App. 2009).	*McKinney v. State,* 693N.E.2d 65, 68-69 (Ind.1998).	*Missi v. CCC Custom Kitchens, Inc.,* 731 N.E.2d 1037, 1041 (Ind. Ct. App. 2000); *Clark's Pork Farms v. Sand Livestock Sys., Inc.,* 563 N.E. 2d 1292,1301 (Ind. Ct. App. 1990).		
Iowa *Consumer Frauds Act* Iowa Code §§ 714.16 ; 714H	Private right of action allowed.	Class action permitted only after receiving approval from attorney general that lawsuit is not "frivolous."	Within two years of the occurrence of the last event giving rise to the cause of action or within two years of the discovery of the violation	A consumer "who suffers an ascertainable loss of money or property"		Although unclear, reliance may not need to be proven if action is for equitable relief.	Claimant "must prove that the prohibited practice related to a material fact or facts."	Shall not engage in practice or act the person "knows or reasonably should know is an unfair practice . . ." with "the intent that others rely upon the unfair practice . . . ."	Actual damages, treble damages (in some instances), equitable relief, and attorney's fees.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Requires notice to Attorney General within seven days of filing.
	Iowa Code § 714H	Iowa Code § 714H.7	Iowa Code § 714H.5(5)	Iowa Code § 714H.5			Iowa Code § 714H.3(1)	Iowa Code § 714H.3(1)	Iowa Code § 714H.5		Iowa Code § 714H.6
						State v. HydroMag Ltd., 436 N.W.2d 617, 621 (discussing requirements for State attorney general to prove violation).				*Smith v. Stowell*, 125 N.W.2d 795, 800 (Iowa 1964) ("[A] person is not entitled to compensation on the ground of unjust	

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
										enrichment if he received . . . that which it was agreed between them the other should give in return." (quoting Restatement (First) of Restitution § 107 cmt. (1)a (1937))), overruled on other grounds, *Lamp v. Amer. Prosthetics, Inc.*, 379 N.W.2d 909, 910 (Iowa 1986).	
Kansas *Consumer Protection Act* Kan. Stat. Ann. §§ 50-623, *et seq.*	Private right of action allowed.	Class action allowed. Class action only allowed for certain claims.	**Three years from date of violation**.	Only "aggrieved" consumer can file an individual private cause of action and receive damages; only one who suffers loss or injury may recover damages in a class action.		"Causal connection" required. However, reliance not required.	Misrepresentation or omission must be of a **"material fact**."	Most deceptive acts or practices require **willful or knowing** (or have reason to know of) misrepresentation or omission. Party must not willfully violate Act, but must merely engage in the willful use of a misrepresentation or an omission.	In individual action, plaintiff may recover equitable relief or the greater of damages or civil penalty of up to $10,000 per violation. Punitive damages may be awarded. Attorneys' fees are discretionary. Recovery in class actions limited to recover of actual damages.	Unjust enrichment is unavailable if defendant has provided consideration for benefit received.	Consumers limited to individuals, husbands and wives, sole proprietors, or family partnerships. Jury trial allowed.
	Kan. Stat. Ann. § 50-634,50-634(d)	Kan. Stat. Ann. §§ 50-634, 50-634(d)	Kan. Stat. Ann. § 60-512(2)	Kan. Stat. Ann. §§ 50-634(b), (d)		Kan Stat. Ann. §§ 50-626,50-634(b), (d)	Kan. Stat. Ann. §§ 50-626(a), (b)(2)- (4)	Kan. Stat. Ann. §§ 50-626(a), (b)	Kan. Stat. Ann. §§ 50-636, 50-634(b), 50-634(e), 50-636(a),50-636(d)		Kan. Stat. Ann. § 50-624(b)
			Alexander v. Certified Master Builders Corp., 1P.3d 899, 905-08 (Kan.2000); *Haag v. Dry Basement, Inc.*, 732 P.2d392 (Kan. Ct. App. 1987).	*Lowe v. Surpass Res. Corp.*, 253 F. Supp. 2d1209, 1229 n.16 (D. Kan.2003); *Finstad v. Washburn Univ. of Topeka*, 845 P.2d 685,691 (Kan. 1993).		*Finstad v. Washburn Univ. of Topeka*, 845 P.2d 685,690-92 (Kan. 1993); *Cole v. Hewlett-Packard Co.*, No.90-164, 2004 WL 376471, at *6 (Kan. Ct. App. Feb 27,2004).		*Moore v. Bird Eng'g Co.*, 41 P.3d 755, 762-64 (Kan. 2002); *York v. InTrust Bank, N.A.*, 962 P.2d 405, 420-21 (Kan.1998). *Haag v. Dry Basement, Inc.* 732 P.2d 392 (Ct. App. 1987).	*Dodson v. U-Need a Self Storage*, 96 P.3d 667, 673-74 (2004); *York v. InTrust Bank, N.A.*, 962 P.2d 405, 429 (Kan.1998); *Equitable Life Leasing Corp. v. Abbick*, 757 P.2d 304,307-08 (Kan. 1988); *Watkins v. Roach Cadillac, Inc.*, 637P.2d 458, 464 (Kan Ct. App.1981).	*Senne & Co. v. Simon Capital Ltd. P'ship*, No. 93-302, 2007 WL 1175858, at *8 (Kan. Ct. App. Apr. 20, 2007) (underlying premise of a claim for unjust enrichment is that the D received a benefit w/o providing consideration); *Tradesmen Int'l, Inc. v. U.S. Postal Serv.*, 234 F. Supp. 2d 1191, 1205-06 (D. Kan. 2002) (finding that requirement of unjust enrichment claim not met where P fails to allege that D failed to pay for the benefits conferred upon it).	*Waggener v. Seever Sys., Inc.*, 664 P.2d 813, 816 (1983).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
Kentucky *Consumer Protection Act* Ky. Rev. Stat. Ann §§367.110, *et seq.*	Private right of action allowed.	Class action likely prohibited.	One year after any action brought by attorney general terminated or within **two years after violation of the Act**, whichever is later. Discovery rule does not apply.	Must suffer "ascertainable loss of money or property, real or personal, as a result of" violation.	Does not require proof of actual deception of some person.	Proximate causation or causal relationship between the act or practice and injury.	**Materiality required.** Kentucky follows the FTC's definition of "deceptive act": "First, there is a representation, omission, or practice that, second, is likely to mislead consumers acting reasonably under the circumstances, and third, **the representation, omission, or practice is material. "**	Must show defendant's actions are intentional or grossly negligent.	Actual damages, discretionary punitive damages, equitable relief, reasonable attorney's fees, and costs allowed.		Limited to persons who purchase or lease goods or services for personal, family, or household purposes.
	Ky. Rev. Stat. Ann. §367.220(1)		Ky. Rev. Stat. Ann. §367.220(5)	Ky. Rev. Stat. Ann. §367.220(1)		Ky. Rev. Stat. Ann. §367.220(1)			Ky. Rev. Stat. Ann. §§367.220(1), (3)		Ky. Rev. Stat. Ann. §367.220(1)
		Arnold v. Microsoft Corp., No. 00-123, 2001WL 193765, at *6 (Ky. Cir. Ct. July 21, 2000). *But see Ky. Laborers Dist. Council Health & Welfare Trust Fund v. Hill & Knowlton, Inc.*, 24F. Supp. 2d 755, 774 (W.D. Ky. 1998) (class action alleging among its claims, claims under the Consumer Protection Act, and dismissing such claims on other grounds).	*Cook v. State Farm Mutt Auto Ins. Co.*, No. 02-000804, 2004 WL2012375, at *3-4 (Ky. Ct. App. Sept. 10, 2004).		*Telcom Directories, Inc. v. Commw. ex . rel. Cowan*, 833 S.W.2d 848,850 (Ky. Ct. App. 1991).	*Ky. Laborers Dist. Council Health & Welfare Trust Fund v. Hill & Knowlton, Inc.*, 24 F. Supp. 2d 755,774 (W.D. Ky. 1998); *Woods v. Walgreen Co.*, No. 3:01 CV-646-S, 2003WL 1239364, at *3 (W.D. Ky. Mar. 17, 2003).	*Corder v. Ford Motor Co.*, 285 Fed. Appx. 226, 227-28 (6th Cir. 2008).	*Capitol Cadillac Olds, Inc. v. Roberts*, 813 S.W.2d287, 291 (1991); *Sparks v. Re/Max Allstar Realty, Inc.*, 55 S.W.3d 343, 348 (Ky. Ct. App. 2000).			*Hunt Enters., Inc. v. John Deere Indus. Equip. Co.*, 18F.Supp. 2d 697, 702 (W.D. Ky. 1997), aff'd, 162 F.3d1161 (6th Cir. 1998)
Louisiana *Unfair Trade Practices Act* La. Rev. Stat. Ann. §§51:1401, *et seq.*	Private right for individuals only.	Class actions prohibited.	**One year from the time of the transaction or the act.**	Ascertainable loss of money or movable property required.	Must prove some element of fraud, misrepresent ation, deception or other unethical conduct.	Loss must have occurred as a result of the use or employment by another person of an unfair or deceptive method, act or practice.	Must prove some element of fraud, misrepresentation, deception or other unethical conduct.	Defendant must have acted knowingly for treble damages.	Permits recovery of actual damages, attorney's fees, and treble damages for knowing violations, but only if the defendant is put on notice by the director or attorney general. Prejudgment interest available in all Louisiana tort actions. **No punitive damages beyond treble damages**.		Consumer transaction defined to require a natural person transacting primarily for personal, family or household use.
	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. §51:1409(E)	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. § 51:1409(A)	La. Rev. Stat. Ann. §51:1409(A)	La. Rev. Stat. Ann. §51:1409(A)		La. Rev. Stat. Ann. §51:1402(3)
	Iberia Credit Bureau, Inc. v. Cingular Wireless LLC, 379 F.3d 159, 174-75 (5th Cir. 2004).	*Iberia Credit Bureau, Inc. v. Cingular Wireless LLC*, 379 F.3d 159, 174-75 (5th	*Mayo v. Simmon*, 646So. 2d 973, 976 (La. Ct. App. 1994).	*Landrum v. Bd. Of Comm'rs of Orleans Levee Dist.*, 758 F.Supp.387, 392 (E.D. La. 1991).	*Garbutt v. Fairbanks Capital Corp.*, No. 03-1666, 2004 U.S. Dist. LEXIS 17138, at		*Garbutt v. Fairbanks Capital Corp.*, No. 03-1666, 2004 U.S. Dist. LEXIS17138, at *5 (E.D. La. Aug. 27, 2004).		*Laurents v. La. Mobile Homes, Inc.*, 689 So. 2d 536, 542-43 (La. Ct. App. 1997).		

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
		Cir. 2004).			*5 (E.D. La. Aug. 27, 2004).						
Maine *Unfair Trade Practices Act* Me. Rev. Stat. Ann. tit.5, §§ 205-A, *et seq.*	Private right of action.	Class action permitted.	**Six years from discovery.**	Injury must be substantial. Recovery limited to persons who actually purchased defendant's goods or services. Injury must be loss of money or property, real or personal.	Act or practice must have the effect of deceiving the consumer, or inducing her to purchase something that she would not purchase otherwise.	An injury under the Act must be an injury that consumers themselves could not have reasonably avoided.		Intent to deceive not required.	Actual damages or restitution and equitable relief, including injunctive relief, as the court determines necessary and proper. Attorney's fees permitted. Prejudgment interest allowed. **No punitive damages.**		Applies only to purchase of goods or services primarily for personal, family, or household purposes. Statute provides for the right to a jury trial. Plaintiff must send presuit notice to defendants 30 days prior to filing suit. No claim is possible if the injury is outweighed by any countervailing benefits to consumers or competition that the practice produces.
	Me. Rev. Stat. Ann. tit. 5,§ 213	Me. Rev. Stat. Ann. tit. 5,§ 213	Me. Rev. Stat. Ann. tit.14, § 752	Me. Rev. Stat. Ann. tit. 5,§ 213(1)					Me. Rev. Stat. Ann. tit. 5, §§213(1)-(2)		Me. Rev. Stat. Ann. tit. 5, §§213(1), (1-A)
	Sanford v. Nat'l Ass'n for the Self-Employed, Inc., 264 F.R.D. 11, 16 (D. Me. 2010).	*Sanford v. Nat'l Ass'n for the Self-Employed, Inc.*, 264 F.R.D. 11, 16 (D. Me. 2010).	*Campbell v. Machias Sav. Bank*, 865 F. Supp. 26, 34 (D. Me. 1994); *State v. Bob Chambers Ford, Inc.*, 522 A.2d 866, 873-74 (1981).	*Tungate v. MacLean-Stevens Studios, Inc.*, 714 A.2d 792, 797 (Me. 1998); *Hoglund ex rel. Johnson v. DiamlerChrysler Corp.*, 102 F. Supp. 2d 30, 30-32 (D. Me. 2000).	*State v. Weinschenk*, 868 A.2d 200, 206 (2005), *Tungate v. MacLean-Stevens Studios, Inc.*, 714 A.2d 792, 797 (1998).	*State v. Weinschenk*, 868 A.2d 200, 206 (2005), *Tungate v. MacLean-Stevens Studios, Inc.*, 714 A.2d 792, 797 (1998).		*Auto Europe, LLC v. Conn. Indem. Co.*, 321F.3d 60, 66-68 (1st Cir.2003); *State v. Weinschenk*, 868 A.2d200, 206 (2005);*Courtney v. Bassano*,733 A.2d 973, 976 (1999); *Binette c. Dyer Library Ass'n*, 688 A.2d898, 906 (1996).	*State v. Bob Chambers Ford, Inc.*, 522 A.2d 866, 873-74 (1981); *Taylor v. Phillip Morris. Inc.*, No. 00-203, 2001WL 1710710, at *4 (Me. Sup. Ct. May 29, 2001).		*Tungate v. MacLean-Stevens Studios, Inc.*, 714 A.2d 792, 797 (1998).
Maryland *Consumer Protection Act* Md. Code Ann., Com. Law §§ 13-1010, *et seq.*	The Consumer Protection Division or the attorney general may take action. Also, Act provides for a private right of action.	Class action permitted.	**Three years.**	Private right of action may be brought to recover for injury or loss sustained as a result of prohibited practices. May only be invoked to compensate a consumer for an actual injury or loss.	Representation must have the capacity, tendency, or effect of deceiving or misleading the consumer. However, actual deception not necessary.	Private right of action for damages requires injury or loss as the result of proscribed practice.	**Misrepresentation or omission must be of a material fact**. A deceptive practice must include a material misrepresentation involving information important to consumers and therefore likely to affect their choice of product.	No intent required.	For private right of action, compensatory damages; no punitive damages. Attorney's fees may also be recovered after other damages are awarded. Attorney's fees may also be available to defendants where the court is satisfied that the action was brought in bad faith or is of a frivolous nature.		The Consumer Protection Act applies only where the purchaser intends to use the goods for personal, household, family, or agricultural purposes. The intent of the Maryland General Assembly is that, in construing "unfair or deceptive trade practices," due consideration and weight should be given to the interpretations of §5(a)(1) of the Federal Trade Commission Act by the Federal Trade Commission and the federal courts.

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50 State Survey of State Consumer Protection, Deceptive Trade Practices Laws, and Unjust Enrichment

JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	Md. Code Ann., Com. Law §§ 13-301, 13-408(a)	Md. Code Ann., Com. Law § 13-408(a)	Md. Code Ann., Cts. & Jud. Proc. § 5-101	Md. Code Ann., Com. Law § 13-408(a)	Md. Code Ann., Com. Law §§ 13-301(1), 13-302	Md. Code Ann., Com. Law §13-408(a)	Md. Code Ann., Com. Law §§ 13-301(3), (4), (9)	Md. Code Ann., Com. Law § 13-301(1)	Md. Code Ann., Com. Law §§13-408(a), (b), (c)		Md. Code Ann., Com. Law§§ 13-105
	Philip Morris Inc. v. Angeletti, 752 A.2d 200,234-36 (2000); *Morris v. Osmose Wood Preserving*, 667 A.2d 624, 634 (1995).		*Greene Tree Home Owners Ass'n, Inc. v. Green Tree Assocs.*, 749 A.2d 806, 820-21 (2000).	*Morris v. Osmose Wood Preserving*, 667 A.2d624, 634 (1995); *Berg v. Byrd*, 720 A.2d 1283, 1286 (Md. Ct. Spec. App.1998).			*Luskin's, Inc. v. Consumer Prot. Div.*,726 A.2d 702, 713 (1999).	*Consumer Prot. Div. v. Morgan*, 874 A.2d 919 (2005); *Golt v. Phillips*, 517 A.2d 328, 332-33 (1986).	*Hoffman v. Stamper*, 867 A.2d 276, 304 (2005); *Golt v. Phillips*, 517 A.2d 328, 332-33 (1986); *McGraw v. Loyola Ford, Inc.*, 723 A.2d 502, 510 (Md. Ct. Spec. App. 1999).		*Morris v. Osmose WoodPreserving*, 667 A.2d 624,634 (1995).
Massachusetts *Consumer Protection Act* Mass. Ann. Laws ch.93A, §§ 1, *et seq.*	Private right of action.	Class action permitted.	**Four years from discovery**.	Injury required.		**Causation required** between unfair acts and claimed loss. **Reliance not required.**	Deceptive if contains **material omission.**	No intention to deceive need be shown; defendant need not know representation was false.	**Greater of actual damages or $25 and double to treble damages for willful or knowing violations.** Prejudgment interest allowed. Attorneys' fees mandatory in class actions unless a reasonable settlement was rejected. Court shall award injunctive and other equitable relief as deemed necessary and appropriate.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain,** or where defendant has provided consideration for the benefit received. Unjust enrichment claim requires that plaintiff lacks a legal remedy. Whether receipt of benefit was unjust depends on parties' reasonable expectations.	**Presuit demand required at least 30 days prior to filing action.** If reasonable settlement offer is rejected by the plaintiffs, then the court may limit recovery to settlement amount. Jury trials are allowed, but only upon the request of a judge.
	Mass. Ann. Laws ch. 93A,§§ 9(1), (2)	Mass. Ann. Laws ch. 93A,§§ 9(1), (2)	Mass. Ann. Laws ch. 260,§ 5A	Mass. Ann. Laws ch. 93A,§ 9(1)					Mass. Ann. Laws ch. 93A, §§9(3), (4)		Mass. Ann. Laws ch. 93A,§§ 9(3), (4)
	Szymanski v. Boston Mut. Life Ins. Co., 778 N.E.2d 16, 19-20 (Mass App. Ct. 2002).			*Hershenow v. Enter. Rent-a-Car Co. of Boston, Inc.*, 840 N.E.2d 526, 535 (2006).		*Sebago, Inc. v. Beazer E., Inc.*, 18 F. Supp. 2d 70, 103 (D. Mass. 1998); *Aspinall v. Philip Morris Cos.*, 813 N.E.2d 476, 486-87 (2004); *Slaney v. Westwood Auto, Inc.*, 322 N.E.2d 768, 779 (1975); *Fraser Eng'g Co. v. Desmond*, 524 N.E.2d 110,113 (Mass App. Ct. 1988).	*Aspinall v. Philip Morris Cos.*, 813 N.E.2d 476, 486-87 (2004); *Underwood v. Risman*, 605 N.E.2d 832, 835 (1993).	*Swanson v. Bankers Life Co.*, 450 N.E.2d 577, 580 (1983); Slaney v. Westwood Auto, Inc., 322 N.E.2d 768, 779 (1975); *Golber v. BayBank Valley Trust Co.*, 704 N.E.2d 1191,1194 (Mass App. Ct.1999); Fraser Eng'g Co. v. Desmond, 524 N.E.2d110, 113 (Mass App. Ct.1988).	*Aspinall v. Philip Morris Cos.*, 813 N.E.2d 476, 486-87 (2004); *McEvoy Travel Bureau Inc. v. Norton Co.*, 563 N.E.2d 188, 196 (1990).	*Cmty. Builders, Inc. v. Indian Motorcycle Associates, Inc.*, 692 N.E.2d 964, 979 (Mass. App. Ct. 1998)(holding that to recover under restitution there must be an unjust benefit and whether the benefit is unjust is determined by the reasonable expectations of the parties); *Ferola v. Allstate Life Ins. Co.*, No. 050996, 2007 WL 2705534, at *14 (Mass. Super. Ct. Aug. 30, 2007). *Ferola v. Allstate Life Ins. Co.*, No. 050996, 2007 WL 2705534, at *14 (Mass. Super. Ct. Aug. 30, 2007) (unjust enrichment	*Travis v. McDonald*, 490N.E.2d 1169, 1172 (1986); Newly Wed Foods, Inc. v. Superior Nut Co., Inc., No.05-0454E, 2010 WL1178404, at *2 (Mass. Super. Ct. Feb. 18, 2010).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
										will not lie where defendant provided valuable consideration). *Fernandes v. Havkin*, 731 F. Supp. 2d 103, 114 (D. Mass. 2010). *Metro Life v. Cotter*, 464 Mass. 623, 644 (2013) (defining "unjust" based on parties' expectations).	
Michigan *Consumer Protection Act* Mich. Comp. Laws Serv. §§ 445.901, *et seq*.	Private right of action allowed.	Class action allowed.	Later of six years after occurrence of act and one year after last payment.	Plaintiff must have "suffer[ed a] loss. "The Act allows recovery for mental distress where those damages are the "legal and natural consequences of the wrongful act and might reasonably have been anticipated."		Loss must be "as a result of a violation" of the Act. Misleading acts or practices must be proximate cause of any damages. Members of a class action "need not individually prove reliance on the alleged misrepresentations," just need to show reasonable person would have relied.	Requires proof that a "reasonable person would have relied on the representations. "Actions under §§ 455. 903(1)(s), (bb), and (cc) require omission or misrepresentation as to a **material fact,** which is a fact "that is important to the transaction or affects the consumer's decision to enter into the transaction."	Plaintiff must show defendant's **intent to deceive** through a pattern of misrepresentation	In individual actions, the greater of actual damages or$250 and attorney's fees. Class actions are limited to actual damages. Injunctive and declaratory relief also available. Punitive damages are allowed for persistent and knowing violations, not to exceed$25,000 in actions brought by the Attorney General.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Purchase must be "primarily for personal, family or household purposes.""[I]f an item is purchased primarily for business or commercial rather than personal purposes, the [Act] does not supply protection. "If a defendant shows that a violation was made through a good-faith error, plaintiff's damages are limited to actual damages.
	Mich. Comp. Laws Serv. § 445.911	Mich. Comp. Laws Serv. § 445.911	Mich. Comp. Laws Serv. § 445.911(7)	Mich. Comp. Laws Serv. §§ 445.911(2),(3)		Mich. Comp. Laws Serv. §§445.911(2), (3)	Mich. Comp. Laws Serv. §§454.903(1)(s), (bb), (cc)		Mich. Comp. Laws Serv. §§445.905(1), 445.911(1), (2), (3)		Mich. Comp. Laws §§445.902(g), 445.911(6)
				Lozada v. Dale Baker Oldsmobile, Inc., 136 F. Supp. 2d 719, 728 (W.D. Mich. 2001).		*Dix v. Am. Bankers Life Assurance Co. of Fla.*, 415N.W.2d 206, 209 (1987);*Zine v. Chrysler Corp.*, 600N.W.2d 384, 399 (Mich. Ct. App. 1999).	*Dix v. Am. Bankers Life Assurance Co. of Fla.*, 415 N.W.2d 206, 209 (1987); *Zine v. Chrysler Corp.*, 600 N.W.2d384, 398 (Mich. Ct. App. 1999).	*Dix v. Am. Bankers Life Assurance Co. of Fla.*,415 N.W.2d 206, 209 (1987).	*Smolen v. Dahlmann Apartment, Ltd.*, 186 Mich. App. 292, 296-97 (1990).	*Isom v. NE Lots LLC*, No. 288378, 2010 WL 143470, at *6 (Mich. Ct. App. Jan. 14, 2010) (finding that a party cannot state a claim of unjust enrichment when said party received the benefit of its bargain); *Russell v. Zeemering*, No. 260660, 2006 WL 2382511, at *5 (Mich. Ct. App. Aug. 17, 2006).	*Zine v. Chrysler Corp.*, 600N.W.2d 384, 393 (Mich. Ct. App. 1999).
Minnesota *Prevention of Consumer Fraud Act* Minn. Stat. §§325.F.68, *et seq*.	Private right of action allowed.	Class action allowed.	**Six years.**	Civil remedy available to "any person injured. "Not limited to actual purchaser of products "as long as the plaintiff alleges an injury" from conduct prohibited	Deception not necessary only "intent that others rely. . . whether or not any person has in fact been misled, deceived, or damaged thereby"	Injury must be "by a violation of the Act. There must be a "proper legal nexus between the complained of acts and their alleged monetary losses. "Proof of reliance is	Deception must be **"material"** l to the "buying decisions" of plaintiffs.	"[I]ntent that others rely. . . whether or not any person has in fact been misled, deceived or damaged thereby."	Actual damages, "costs of investigation," reasonable attorney's fees and injunction relief. Actual damages are to be measured by the "out-of pocket" loss, or the difference between the actual	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.** Unjust enrichment claims require that plaintiff lacks a legal remedy.	Complained of-misrepresentation "must allege that Defendants made fraudulent or misrepresentative statements in connection with sale of goods."

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
				under the Act. Injunction available without showing actual damages.		required for damages, but not for injunctive relief. Causation is a necessary element in an action to recover damages under Minn. Stat. § 8.31(3a).			value of the merchandise and the price paid for the merchandise "along with any special damages naturally and proximately caused by the fraud prior to its discovery, including expenses incurred in mitigating the damages."	**SOL for unjust enrichment claims is 6 years.**	
	Minn. Stat. § 8.31(3a)	Minn. Stat. § 8.31(3a)	Minn. Stat. §§ 541.05(1)- (2)	Minn. Stat. § 8.31(3a)	Minn. Stat. §§325F.69(1) , 325F.70	Minn. Stat. § 8.31(3a)		Minn. Stat. §§325F.69(1); 325F.70	Minn. Stat. § 8.31(3a)		
	Dahl v. Charles Schwab & Co., 545 N.W.2d 918, 920 (Minn. 1996).	*Dahl v. Charles Schwab & Co.*, 545 N.W.2d 918 ,920 (Minn. 1996).	*Estate of Riedel v. Life Care Ret. Communities, Inc.*, 505 N.W.2d 78, 83 (Minn. Ct. App. 1993).	*Group Health Plan, Inc. v. Philip Morris, Inc.*, 621 N.W.2d 2, 11 (Minn.2001); *LeSage v. Norwest Bank Calhoun- Isles, N.A.*, 409 N.W.2d 536, 539 (Minn. Ct. App.1987).	*LeSage v. Norwest Bank Calhoun-Isles, N.A.*, 409N.W.2d 536, 539 (Minn. Ct. App. 1987).	*Thompson v. Am. Tobacco Co.*, 189 F.R.D. 544, 553 (D. Minn. 1999); *Parkhill v. Minn. Mutt. Life Ins. Co.*,188 F.R.D. 332, 344-45 (D. Minn. 1999); *Group Health Plan, Inc. v. Philip Morris, Inc.*, 621 N.W.2d 2, 11 (2001); *LeSage v. Norwest Bank Calhoun-Isles, N.A.*, 409 N.W.2d 536, 539 (Minn. Ct. App. 1987).	*Nordale, Inc. v. Samsco, Inc.*, 830 F.Supp. 1263, 1272 (D. Minn. 1993).	*LeSage v. Norwest Bank Calhoun-Isles, N.A.*, 409N.W.2d 536, 539 (Minn. Ct. App. 1987).	*B.F. Goodrich Co. v. Mesabi Tire Co.*, 430 N.W.2d 180, 182 (Minn. 1988); *Higgins v. Harold-Chevrolet-Geo, Inc.*, No. A04-596, 2004 WL2660923, at *3-4 (Minn. Ct. App. Nov. 23, 2004).	*Zinter v. Univ. of Minn.*, 799 N.W.2d 243, 247 (Minn. Ct. App. 2011) (holding a claim for unjust enrichment fails where a plaintiff receives the benefit for which she was entitled under an agreement),*review denied* (Aug. 16, 2011). *Kelley v. College of St. Benedict*, 901 F. Supp. 2d 1123, 1132-33 (D. Minn. 2012) (granting motion to dismiss unjust enrichment claims where the statute "provided [plaintiff] with an adequate legal remedy" even where plaintiff "did not timely avail himself of the statute"); *Arena Dev. Grp., LLC v. Naegele Commc'ns, Inc.*, Civ. No. 06–2806, 2007 WL 2506431, at *11 (D. Minn. Aug. 30, 2007); *Mon-Ray, Inc. v. Granite Re, Inc.*, 677 N.W.2d 434, 440 (Minn. Ct. App. 2004 ; *Southtown Plumbing, Inc. v. Har-Ned Lumber Co., Inc.*, 493 N.W.2d 137, 140 (Minn. Ct. App. 1992) ("It is well settled in Minnesota that one	*Group Health Plan, Inc. v. Philip Morris, Inc.*, 68 F. Supp. 2d 1064, 1069-70 (D. Minn. 1999).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
										may not seek a remedy in equity when there is an adequate remedy at law.").	
Mississippi *Consumer Protection Act* Miss. Code Ann. §§ 75-24-1, *et seq.*	Private right of action allowed, but (1) only for people leasing or purchasing goods or services primarily for personal use; and only after exhausting administrative remedies.	No class actions permitted.	**Three years.**	Plaintiff must have suffered "any ascertainable loss of money or property."	Statements need not be literally false, but only must be capable of deceiving a reasonable person.	"Ascertainable loss" must be as "a result of" unlawful acts.	Materiality required. It is the intent of the Legislature that in construing what constitutes unfair or deceptive trade practices that the courts will be guided by the interpretations given by the Federal Trade Commission and the federal courts to Section 5(a)(1) of the Federal Trade Commission Act (15USCS 45(a)(1)) as from time to time amended. The FTC has consistently adhered to the *Cliffdale Associates* standard which requires that the **representation, omission, or practice is material.**	Only some subsections require intent.	Compensatory damages only. Court may award prevailing defendant attorney's fees and costs if plaintiff's claims were frivolous or to harass. Civil penalty of $10,000 if violation was knowing or willful upon petition of the Attorney General.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Private right of action limited to purchases of goods or services "primarily for personal, family or household purposes." Prior to bringing a claim, plaintiff must have made a reasonable attempt to resolve any claim through informal dispute program. No class actions.
	Miss. Code Ann. § 75-24-15	Miss. Code Ann. § 75-24-15	Miss. Code Ann. § 15-1-49	Miss. Code Ann. § 75-24-15(1)		Miss. Code Ann. § 75-24-15(1)	Miss. Code Ann. § 75-24-3(c)	Miss. Code Ann. §§ 75-24-5(i), (j)	Miss. Code. Ann. §§ 75-24-15(1), (3), 75-24-19		Miss. Code Ann. §§ 75-24-15(1), (2), (4)
			Clark v. Commercial Credit Corp., 357 F. Supp. 2d 962, 965 (S.D. Miss. 2005).		*Sw. Starving Artists Group, Inc. v. State ex rel. Summer*, 364 So. 2d1128, 1131 (Miss. 1978).		*FTC v. Panton 1 Corp.*, 33 F.3d 1088,1095 (9th Cir. Cal. 1994).			*Omnibank of Mantee v. United S. Bank*, 607 So. 2d 76, 92 (Miss. 1992) (noting that the Supreme Court of Mississippi historically cites the Restatement of Restitution with approval).	
Missouri *Merchandising Practice Act* Mo. Rev. Stat. §§ 407.010, *et seq.*	Private right of action allowed; limited to "merchandise primarily for personal, family or household purposes."	Class action allowed.	**Five years.**	Plaintiff must have suffered an "ascertainable loss of money or property." Reliance is not required		"Ascertainable loss" must be "a result of" unlawful acts. Injury must be "proximately caused by defendant's actions."	The act, use or employment by any person of any deception, fraud, false promise, misrepresentation, unfair practice or the concealment, suppression, or omission of **any material fact** in connection with the sale or advertisement of any merchandise in trade or commerce or the solicitation of any funds for any charitable purpose, as defined in section 407.453, in or from the state of Missouri, is declared to be an unlawful practice.	No need to prove intent.	Actual damages and discretionary punitive damages and attorney's fees.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain,** or where defendant has provided consideration for the benefit received.	Consumers who purchase goods for their business do not have standing to sue under the Act. Specific class action requirements in the Act.
	Mo. Rev. Stat. § 407.025	Mo. Rev. Stat. § 407.025	Mo. Rev. Stat. § 516.120	Mo. Rev. Stat. §407.025(1)		Mo. Rev. Stat. § 407.025(1)	Mo. Rev. Stat. § 407.020(1)		Mo. Rev. Stat. § 407.025(1)		Mo. Rev. Stat. §§407.025(3)-(4)
				State v. Area Co. Inv. Co.,756 S. W. 2d 633, 635-36 (Mo. App. 1988).		*Willard v. Bic Corp.*, 788 F. Supp. 1059, 1070 (W.D. Mo. 1991).		*State ex rel. Nixon v. Beer Nuts*, 29 S.W.3d828, 837 (Mo. Ct.		*Howard v. Turnbull*, 316 S.W.3d 431, 438 (Mo. Ct. App. 2010) (affirming that plaintiff	*Saey v. CompUSA, Inc.*, 174F.R.D. 448, 450 (E.D. Mo.1997).

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
								App.2000); *State ex rel. Webster v. Area Co Inv. Co.* 756 S. W. 2d 633,635 (Mo. Ct. App. 1988) ("It is the defendant's conduct, not his intent, which determines whether a violation has occurred.").		cannot recover for unjust enrichment when he received "precisely what he bargained for"), transfer denied (Aug. 31, 2010). *Cnty. Asphalt Paving, Co. v. Mosley Constr., Inc.*, 239 S.W.3d 704, 710 (Mo. Ct. App. 2007) (finding that plaintiff must plead nonpayment by defendant in order to assert an unjust enrichment claim).	
Montana *Unfair Trade Practices and Consumer Protection Act* Mont. Code Ann. §§30-14-101, *et seq.*	Private right of action.	Class actions prohibited.	**Two years.**	Plaintiff need only show an ascertainable loss of money or property.		Reliance probably not required.	**Materiality required**. The intent of the legislature is that, in construing the Act, due consideration and weight should be given to the interpretations of § 5(a)(1) of the Federal Trade Commission Act by the Federal Trade Commission and the federal courts. **The FTC has consistently adhered to the *Cliffdale Associates* standard which requires that the representation, omission, or practice is material.**	No mention of any requirement that the party first must prove malice, oppression or fraud.	Actual damages or $500, whichever is greater, recoverable by individual. Discretionary attorney's fees to prevailing plaintiff; discretionary attorneys' fees to defendant if action is frivolous. **Treble damages available, only remedial and not punitive in nature.**		
	Mont. Code Ann. § 30-14-133(1)	Mont. Code Ann. § 30-14-133(1)	Mont. Code Ann. § 27-2-211	Mont Code Ann. § 30-14-133(1)			Mont Code Ann. § 30-14-104		Mont. Code Ann. §§ 30-14-133(1), (3)		
			Osterman v. Sears Roebuck & Co., 80 P.3d 435, 440 (2003).			*Durbin v. Ross*, 916 P.2d758, 762 (1996) (listing reliance as an element for fraud but not specifically required for CPA violations.)	*FTC v. Pantron I. Corp.*, 33 F.3d 1088,1095 (9th Cir. 1994).	*T & W Chevrolet v. Darvial*, 641 P.2d 1368,1371-72 (1982).	*Tripp v. Jeld-Wen, Inc.*, 112 P.3d 1018, 1026 (2005); *Plath v. Schonrock*, 64 P.3d 984,989-90 (2003).		
Nebraska *Consumer Protection Act* (Neb. Rev. Stat. Ann. §§ 59-1601 to1623 (LexisNexis2012));*Uniform Deceptive Trade Practices Act* (Neb. Rev. Stat. Ann.§§ 87-301 to 306	Under the CPA, private right of action if deceptive act affects the public interest. Under the Uniform Deceptive Trade Practices Act (DTPA), private right of action for equitable relief.	Class actions allowed.	Under the CPA, four years after the cause of action accrues. Under the DTPA, four years from the date of the purchase of the goods.	Plaintiff must be injured in his business or property.	Plaintiff must prove the practice possessed the tendency or capacity to mislead, or created the likelihood of deception.	A claim may be brought by any person who is injured by a violation of the CPA. Knowledge of truth by plaintiff prior to acting may negate claim.	No cases found. The CPA is patterned off the Sherman Act. The DTPA does not have a general material misrepresentation of fraud cause of action. None of the cases that discuss violations of Neb. Rev. Stat. Ann. § 87-302 (LexisNexis 2012) mention materiality.	No particular intent required.	Under the CPA, recovery of actual damages allowed. Court can increase the award of damages to an amount that bears to actual damages which are not susceptible to measurement, but not to exceed $1,000. Under the DTPA, recovery of actual damages not allowed.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**	To be actionable under the CPA, the unfair practice or deceptive act or practice must have an impact upon the public interest, which can be direct or indirect.
	Neb. Rev. Stat. Ann. §§59-1601(2), 59-	Neb. Rev. Stat. Ann. §§59-	Neb. Rev. Stat. Ann. §§59-	Neb. Rev. Stat. § 59-1609 (LexisNexis		Neb. Rev. Stat. Ann. § 59-1609		Neb. Rev. Stat. Ann. §§59-	Neb. Rev. Stat. Ann. § 59-1609	*Washa v. Miller*, 546 N.W.2d 813, 819	

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50 State Survey of State Consumer Protection, Deceptive Trade Practices Laws, and Unjust Enrichment

JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	1609, 87-303(a)	1601(2), 59-1609, 87-303(a)	1612, 87-303.10	2012).		(LexisNexis 2012); *but see* Neb. Rev. Stat. Ann. §87-303(a) (LexisNexis 2012) (allowing injunctive relief for any person likely to be damaged by a deceptive trade practice of another).		1069, 87-303(a)		(Neb. 1996) ("[T]he enrichment of one party at the expense of the other is not unjust where it is permissible under the terms of an express contract.").	
	Nelson v. Lusterstone Surfacting Co., 605 N.W.2d 136, 141-42 (2000); *Reinbrecht v. Walgreen Co.*, 742 N.W.2d 243, 247-48 (Neb. Ct. App. 2007).		*Meyer Bros. Inc. v. Travelers Ins. Co.*, 250 Neb. 389, 390-91 (1996).		*Road v. Wal-MartStores, Inc.*, 13 F.Supp.2d 1003, 1014 (D. Neb.1998).	*Road v. Wal-Mart Stores, Inc.*, 13 F.Supp. 2d 1003,1016 (D. Neb. 1998).			*Triple-7, Inc. v. Intervet, Inc.*, 338 F.Supp. 2d 1082, 1087 (D. Neb. 2004).		*Arthur v. Microsoft Corp.*, 676 N.W.2d 29, 38 (2004); *Nelson v. Lusterstone Surfacting Co.*, 605 N.W.2d136, 141-42 (2000).
Nevada *Deceptive Trade Practices Act* Nev. Rev. Stat. Ann §§598.0903, *et seq.*	Only an elderly or disabled person has a private right to action under the Act. However, the attorney general has the power to enforce the Act and seek penalties.	Class actions allowed.	Four years accruing from the date facts constituting deceptive trade practices were discovered or should have been discovered.	Claim is limited to recovery of any damages sustained.	Deceptive trade practices include failure to disclose a material fact in connection with the sale of goods.	A claim may be brought by or on behalf of any person who is a victim of consumer fraud.	A person engages in a deceptive trade practice when in the course of his business or occupation he knowingly **fails to disclose a material fact** in connection with the sale or lease of goods or services . . . Or fails to state a material fact which is necessary to make another statement, considering the circumstances under which it is made, not misleading.	Requires defendant **knowingly** made a false representation or knowingly failed to disclose a material fact.	Only elderly or disabled may recover actual damages, punitive damages, and attorney's fees.	Unjust enrichment is unavailable if defendant has provided consideration for benefit received.	
	Nev. Rev. Stat. Ann. §§ 598.0915, 598.0925, 598.0977		Nev. Rev. Stat. Ann §11.190(2)(d)	Nev. Rev. Stat. Ann. §41.600(1)	Nev. Rev. Stat. Ann. §598.0923(2)	Nev. Rev. Stat. Ann. §41.600(1)	Nev. Rev. Stat. Ann. §598.0923(2)	Nev. Rev. Stat. Ann. §§598.0915, 598.0923	Nev. Rev. Stat. Ann. §598.0977		
								Scaffidi v. United Nissan, 425 F.Supp. 2d 1172, 1184-85 (D. Nev. 2005).		*Bowyer v. Davidson*, 584 P.2d 686, 687 (Nev. 1978) (finding no unjust enrichment where defendant paid the amounts due on the contract).	
New Hampshire *N.H. Consumer Protection Act ("CPA")* N.H. Rev. Stat. Ann. §§358-A:1, *et seq.*	Attorney general may enforce the Act. Also provides for a private right of action.	Class actions allowed.	**Three years** from date violation was known or reasonably should have been known, but evidence of conduct more than three years earlier may be introduced.	Act allows any person injured to bring a claim and to bring a class action if the unlawful act or practice has caused similar injury to numerous other persons. The Act does not require a showing of actual damages for the claimant to be awarded the statutory minimum and attorneys' fees.		**Plaintiff must establish a causal link between the unlawful conduct and their injuries.**	**Material omissions** may be actionable.	No level of intent is required for normal damages. Damages doubled or trebled for willful or knowing violations.	**In individual actions, greater of action damages or $1,000** and attorney's fees; if the violation was willful or knowing, then the court *shall* double or treble actual damages. **Class action damages limited to actual damages**, equitable relief, and discretionary attorneys' fees.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**, or where defendant has provided consideration for the benefit received. Unjust enrichment claims allowed where D innocently received a benefit and passively accepted it.	Specific class action provision within Act.

JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	N.H. Rev. Stat. Ann. §§358-A:2, 358-A:10, 358- A:10-a	N.H. Rev. Stat. Ann. §§358-A:10, 358-A:10-a	N.H. Rev. Stat. Ann. §358-A:3	N.H. Rev. Stat. Ann. §358-A:10-a		N.H. Rev. Stat. Ann. §358-A:11		N.H. Rev. Stat. Ann. §358-A:10	N.H. Rev. Stat. Ann. §§ 358- A:10, 358-A:10-a		N.H. Rev. Stat. Ann. § 358- A:10-a
				Preferred Nat'l Ins. Co. v. Docusearch, Inc., 829 A.2d 1068, 1075 (2003).		*Mulligan v. Choice Mortg. Corp. USA*, No. 96-596-B, 1998 WL 544431, at *11 (D.N.H. Aug. 11, 1998).	*FTC v. World Travel Vacation Brokers, Inc.*, 861 F.2d 1020, 1029 (7th Cir.1988); *State v. Moran*, 861 A.2d 763,766 (2009).	*Barrows v. Boles*, 687A.2d 979, 986-87 (1996) ("The objectionable conduct must attain a level of rascality that would raise an eyebrow of someone inured to the rough and tumble of the world of commerce.").		*Clapp v. Goffstown Sch. Dist.*, 977 A.2d 1021, 1025 (N.H. 2009) (holding that a person who has conferred a benefit is not entitled to compensation, other than in accordance with the terms of such bargain, unless the transaction is rescinded). *Axenics, Inc. v. Turner Constr. Co.*, 62 A.3d 754, 766-67 (N.H. 2013). *Petrie-Clemons v. Butterfield*, 441 A.2d 1167, 1172 (N.H. 1982)(applying passive acceptance standard).	
New Jersey *Consumer Fraud Act* N. J. Stat. Ann. §§ 56:8-19, *et seq.*	Private right of action allowed.	Class actions allowed.	**Six years.**	Plaintiff must show "ascertainable loss of money or property." Standing requires a plaintiff to plead a claim for damages that would survive in a summary judgment motion. In cases of misrepresentation, either out of pocket loss or loss in value will be sufficient.		"While the element of traditional reliance required in a fraud case need not be proven in order to recover damages under the CFA, a private plaintiff must still 'prove a causal nexus between the alleged [misrepresentation]' and his or her damages." *Dabush*.	Materiality required. There are three kinds of violations of the Act, one of which is a **knowing omission of material facts** in connection with the advertisement or sale of merchandise.	Defendant's intent is not an element; liability for affirmative misrepresentations requires no knowledge of the falsity of the misrepresentation, negligence, or the intent to deceive. Fraud requires a showing of intent that others rely upon such concealment or omission. "The requirement that knowledge and intent be shown is limited to the concealment, suppression or omission of any material fact." (*Fenwick*, at 377).	Damages limited to party's "ascertainable loss of moneys or property." **No punitive damages**, but treble damages mandatory once plaintiff proves unlawful practice under Act and resulting ascertainable loss. Attorney's fees mandatory if plaintiff proves unlawful practice defined by Act.	Unjust enrichment requires some direct relationship between the parties.	Plaintiff must mail a copy of the complaint to the attorney general within 10 days of filing. Only AG can bring actions for purely injunctive relief.
	N.J. Stat. Ann. § 56:8-19	N.J. Stat. Ann. § 56:8-19	N. J. Stat. Ann. § 2A:14-1	N. J. Stat. Ann. § 56:8-19		N. J. Stat. Ann. § 56:8-19		N.J. State Ann. § 56:8-2	N. J. Stat. Ann. § 56:8-19		N. J. Stat. Ann. § 56:8-20
	Weinberg v. Sprint Corp., 801 A.2d 281, 283-84 (N.J.	*Kulger v. Romain*, 58 N.J. 522 (1971); *Varacallo*	*Mirra v. Holland Am. Line*, 331 N.J. Super. 86, 90 (N.J.	*Thiedemann v. Mercedes-Benz U.S. LLC*, 183 N.J. 234,		*Cox v. Sears Roebuck & Co.*, 647 A.2d 454, 464 (N.J.1994);	*Talalai v. Cooper Tire & Rubber Co.*, 360 N. J. Super. 547, 562 (Law Div.2001);	*Fenwick v. Kay Am. Jeep, Inc.*, 72 N.J. 372, 377 (1977);	*Cox v. Sears Roebuck & Co.*, 647 A.2d 454, 465 (N. J.1994); *BJM*	*Callano v. Oakwood Park Homes Corp.*, 91 N.J. Super. 105,	*Zorba Contractors, Inc. v. Housing Authority, City of*

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
	2002).	*v. Mass. Mut. Life Ins. Co.*, 332 N.J. Super. 31, 45 (App. Div. 2006). *Int'l Union of Operating Eng'rs Local 68 Welfare Fund v. Merck & Co.*, 192 N.J. 372, 389-391 (N.J. 2007) (decertifying a nationwide class).	App. Div. 2000).	246 (2005); *Weinberg v. Sprint Corp.*, 801 A.2d 281, 283 (N.J. 2002).		*Dabush v. Mercedes Benz USA, Inc.*, 874 A.2d1110, 1121 (N. J. Super. Ct. App. Div. 2005); *Fink v. Ricoh Corp.*, 839 A.2d 942,976-77 (N. J. Super. Ct. Law Div. 2003); *N.J. Citizen Action v. Schering-Plough Corp.*, 842 A.2d 174, 178 (N.J. Super. Ct. App. Div.2003).	*Fenwick v. Kay Am. Jeep, Inc.*, 72 N.J. 372, 377 (1977).	*Lingar v. Live-In Companions, Inc.*, 300 N.J. Super. 22, 28 (App. Div. 1997); *Thiedmann v. Mercedes- Benz USA, Inc.*, 872 A.2d 783, 791 (N.J. 2005); *Gennari v. Weichert Co. Realtors*, 691 A.2d 350,365 (N.J. 1997).	*Insulation & Constr. Inc. v. Evans*, 287 N. J. Super. 513, 517 (N.J. App. Div.1996) (attorneys' fees).	109-110 (1966).	*Newark*, 362 N.J. Super. 124, 137 (N.J. App. Div. 2003).
New Mexico *Unfair Trade Practices* N.M. Stat. Ann. §§ 57-12-1, *et seq.*	Private right of action allowed.	Class actions allowed.	**Four years from discovery of violation**.	**No injury requirement for injunctive relief only**. In a suit for damages, plaintiffs must have suffered a "loss of money or property. "Only named plaintiffs may recover statutory damages of $100 without proving actual damages.		Any person who suffers a loss of money or property "as a result of" unlawful acts may bring an action. Plaintiff must show that defendant's violation proximately caused plaintiff damages.	**Materiality required.** It is the intent of the legislature that in construing Section 3 of the Unfair Practices Act, the courts to the extent possible will be guided by the interpretations given by the Federal Trade Commission and the federal courts. The FTC has consistently adhered to the *Cliffdale Associates* standard which requires that the representation, omission, or practice is material.	Need not be intentionally made, but defendant must know that representation is false or exercise of reasonable diligence should have known that representation is false.	Greater of actual damages or$100; discretionary treble damages if willful violation. Mandatory attorney's fees to successful plaintiff; attorney's fees and costs to defendant if suit was "groundless. "Unnamed class members limited to actual damages.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Attorney's fees awarded to defendant where plaintiff's claims are groundless. "Good faith" defense is available.
	N.M. Stat. Ann. § 57-12-10	N.M. Stat. Ann. § 57-12-10	N.M. Stat. Ann. § 37-1-4	N.M. Stat. Ann. § 57-12-10(A), (B), (E)		N.M. Stat. Ann. § 57-12-10(B)	N.M. Stat. Ann. § 57-12-2(D)(14)	N.M. Stat. Ann. § 57-12-2(D)	N.M. Stat. Ann. §§ 57-12-10(B), (C), (E)		N.M. Stat. Ann. § 57-12-10(c)
			Tiberi v. Cigna Corp., 89 F.3d 1423, 1430 (10th Cir. 1996).			*Stevenson v. Louis Dreyfus Corp.*, 811 P.2d 1308, 1311 (N.M. 1991).	*FTC v. Panton 1 Corp.*, 33 F.3d 1088,1095 (9th Cir. 1994).	*Taylor v. United Mgmt., Inc.*, 51 F. Supp. 2d1212, 1216 (D.N.M.1999); *Stevenson v. Louis Dreyfus Corp.*, 811P.2d 1308, 1311 (N.M.1991).		*Arena Res., Inc. v. Obo, Inc.*, 238 P.3d 357, 361 (N.M. Ct. App. 2010) (finding a person that has conferred a benefit is not entitled to compensation, other than in accordance with the terms of such bargain, unless the transaction is rescinded).	*Hubbard v. Albuquerque Truck Ctr. Ltd.*, 958 P.2d111, 118-19 (N.M. Ct. App.1998).
New York *Consumer Protection from Deceptive Acts and Practices* N.Y. Gen. Bus. Law §§ 349 to 350-f-1 (Consol. 2013)	Private right of action allowed	Class actions allowed. Split on whether New York law applies to non-residents.	**Three years.**	Plaintiff must prove actual injury but "not necessarily pecuniary harm."	Plaintiff "must plead facts showing actual injury, not merely the alleged deceptive act."	Justifiable reliance by the plaintiff is not an element of the statutory claim."	"Whether a representation or omission, the deceptive practice must be likely to mislead a reasonable consumer acting reasonably under the circumstances."	Intent to defraud is not an element of a claim under the Act. Discretionary treble damages for willful or knowing violations.	Greater of actual damages or $50 in individual action; discretionary treble damages for willful or knowing violations; discretionary attorney's fees to prevailing party. Class recovery limited to actual damages and injunctive relief.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.**	The deception of a consumer must occur in New York. A "complete defense" exists if the act or practice is "subject to and complies with the rules and regulations of . . . the federal trade commission" or other governmental entity of the United States. Plaintiff must show harm to the

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											public interest.
	N.Y. Gen. Bus. Law §349(h) (Consol. 2013).	N.Y. Gen. Bus. Law §349(h) (Consol. 2013).						N.Y. Gen. Bus. Law §349(h) (Consol. 2013).	N.Y. Gen. Bus. Law § 349(h) (Consol. 2013).		N.Y. Gen. Bus. Law § 349(d) (Consol. 2013).
	Blue Cross and Blue Shield of New Jersey, Inc. v. Philip Morris USA, Inc., 344 F.3d 211, 218 (2d Cir. 2003).	*Solomon v. Bell Atlantic Corp.*, 777 N.Y.S.2d 50, 52-53 (App. Div. 2004); *Small v. Lorillard Tobacco Co.*, 679N.Y.S.2d 593, 598-99 (App. Div. 1998). *Scott v. Bell Atl. Corp.*, 726 N.Y.S.2d 60 (2001); *but see Peck v. AT&T Corp.*, N.Y.L.J., Aug. 1, 2002, p. 18, col. 3 (N.Y. Sup.); *Goshen v. Mutual Life Ins. Co. of NY*, 98 N.Y.2d 314, 325 (2002).	*Gaidon v. Guardian Life Ins. Co. of Am.*, 750 N.E.2d 1078, 1084 (N.Y.2001); *State v. Daicel Chem. Indus., Ltd.*, 840 N.Y.S.2d 8, 11 (2007); *Avdon Capitol Corp. v. Nationwide Mut. Fire Ins. Co.*, 658 N.Y.S.2d 383, 384 (1997).	*Stutman v. Chem. Bank*, 731 N.E.2d 608, 611-612 (N.Y. 2000); *Baron v. Pfizer, Inc.*, 840 N.Y.S.2d 445, 448 (3d Dep't 2007); *Small v. Lorillard Tobacco Co., Inc.*, 94 N.Y.2d 43, 55-56 (1999).	*Oswego Laborers' Local214 Pension Fund v. Marine Midland Bank*, 85 N.Y.2d 20, 26 (N.Y.1995).	*Koch v. Acker, Merrall & Condit Co.*, 18 N.Y.3d 940, 941 (2012); *Pelman ex. rel. Pelman v. McDonald's Corp.*, 396 F.3d 508, 511 (2d Cir. 2005); *Stutman v. Chem. Bank*, 731 N.E.2d 608, 611-12 (N.Y. 2000).	*Stutman v. Chem. Bank*, 731 N.E.2d 608, 611-12 (N.Y. 2000).	*Stutman v. Chem. Bank*,731 N.E.2d 608, 612 (N.Y. 2000).	*Karlin v. IVF Am., Inc.*, 93 N.Y.2d 282, 291 (1999) (characterizing discretionary treble damages as "limited punitive damages"); *Teller v. Hayes*, 213 A.D.2d 141, 147 (N.Y. App. Div. 1995); *Super Glue Corp. v. Avis Rent A Car Sys., Inc.*, 517 N. Y.S.2d 764, 767 (N.Y. App. Div. 1987).	*Jermyn v. Best Buy Stores, L.P.*, 256 F.R.D. 418, 437 (S.D. N.Y. 2009) (certifying class based upon UCL and unjust enrichment claims); *One Step Up, Ltd. v. Webster Bus. Credit Corp.*, 925 N.Y.S.2d 61, 70 (N.Y. App. Div. 2011) (dismissing claim for unjust enrichment where "plaintiff received the benefit of its bargain").	*U-Neek, Inc. v. Wal-Mart Stores, Inc.*, 147 F. Supp. 2d 158, 176 (S.D.N.Y. 2001); *Goshen v. Mut. Life Ins. Co.*, 774 N.E.2d 1190, 1195-96 (N.Y. 2002).
North Carolina *Monopolies, Trusts and Consumer Protection* N.C. Gen. Stat. §§ 75-1, *et seq.*	Private right of action allowed.	Class actions allowed.	**Four years.**	Actual injuries required.		Defendant's misrepresentations must have "proximately caused actual injury to the plaintiff." "Substantial factor" test applies in proximate cause determination. Unclear whether reliance is required.	In determining whether a representation is deceptive, its effect on the average consumer is considered.	No particular scienter requirements.	Actual damages that were the proximate result of prohibited conduct. Mandatory treble damages. Discretionary attorney's fees upon a finding that defendant's conduct was willful and defendant refused to negotiate settlement.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.**	Prevailing defendant may receive attorney's fees and costs if court deems plaintiff's claims frivolous.
	N.C. Gen. Stat. § 75-16	N.C. Gen. Stat. § 75-16	N.C. Gen. Stat. § 75-16.2						N.C. Gen. Stat. §§ 75-16, 16.1		N.C. Gen. Stat. § 75-16.1
	Dash v. First Plus Home Owner Loan Trust, 248F. Supp. 2d 489, 494-95 (M.D.N.C. 2003).	*Dash v. First Plus Home Owner Loan Trust*, 248F. Supp. 2d 489, 494-95 (M.D.N.C. 2003).	*Dash v. First Plus Home Owner Loan Trust*, 248F. Supp. 2d 489, 500-01 (M.D.N.C. 2003).	*Wilson v. Blue Ridge Elec. Membership Corp.*,578 S.E.2d 692, 694 (N.C. Ct. App. 2003).		*Am. Rockwool, Inc., v. Owens-Corning Fiberglass Corp.*, 640 F. Supp. 1411,1444 (E.D.N.C. 1986); *Wilson v. Blue Ridge Elec. Membership Corp.*, 578S.E.2d 692, 694 (N.C. Ct. App. 2003); *Tucker v. Boulevard at Piper Glen, LLC*, 564 S.E.2d 423,	*Spartan Leasing Inc. v. Pollard*, 400S.E.2d 476, 482 (N.C. Ct. App. 1991).	*Excel Staffing Serv., Inc. v. HP Reidsville, Inc.*, 616S.E.2d 349, 355 (N.C. Ct. App. 2005).	*Standing v. Midgett*, 850 F. Supp. 396, 402 (E.D.N.C.1993); *Ellis v. Northern Star Co.*, 388 S.E.2d 127, 131 (N.C.1990).	*Britt v. Britt*, 359 S.E.2d 467, 471 (N.C. 1987) (holding plaintiff cannot recover for unjust enrichment where she received the agreed to consideration for the benefit conferred), abrogated on other grounds by *Myers & Chapman, Inc. v. Thomas G.*	

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JDX	PRIVATE RIGHT OF ACTION	CLASS ACTION PROHIBITION	STATUTE OF LIMITATIONS & DISCOVERY RULE	ACTUAL INJURY	DECEPTION	RELIANCE / PROXIMATE CAUSATION	AFFIRMATIVE ACTS / MATERIAL OMISSIONS	SCIENTER	DAMAGES & REMEDIES	LIMITATIONS ON UNJUST ENRICHMENT	OTHER
						431(N.C. Ct. App. 2003) (stating that "actual reliance on the alleged misrepresentation" was required for proximate causation); *but see Cullenv. Valley Forge Life Ins.*,589 S.E.2d 423, 431 (N.C. Ct. App. 2003)(indicating that proof of reliance may not be required).				*Evans, Inc.*, 374 S.E.2d 385 (N.C. 1988).	
North Dakota *Consumer Fraud* N.D. Cent. Code §§ 51-15-01, *et. seq.*	Private right of action allowed.	Class actions allowed.	**Six years.**	Plaintiffs must have suffered a loss of money or property. Requires actual injury.		Reliance not required.		Deceptive act must be made with the "intent that others rely" upon it. "Knowing" conduct may subject defendant to treble damages.	Actual damages; if conduct was "knowing" treble damages allowed; reasonable attorney's fees and costs are mandatory if violation is found.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.** Unjust enrichment claims require that plaintiff lacks a legal remedy.	
	N.D. Cent. Code § 51-15-09	N.D. Cent. Code § 51-15-09	N.D. Cent. Code § 28-01-16(2)			N.D. Cent. Code § 51-15-02		N.D. Cent. Code §§ 51-15-02,-09	N.D. Cent. Code § 51-15-09		
	Hanson v. Acceleration Life Ins. Co., No. A3-97-152, 1999 WL 33283345, at *7 (D.N.D. July 1,1999).			*N.D. Fair Hous. Council, Inc. v. Haider*, No. A1-98-077, 1999 WL 33283355, at *3 (D.N.D. Mar. 9,1999); *Ziegelmann v. Daimler-Chrysler Corp.*,649 N.W.2d 556, 559 (N.D. 2002).						*Jerry Harmon Motors, Inc. v. Heth*, 316 N.W.2d 324, 328 (N.D. 1982) ("[A] person is not entitled to compensation on the ground of unjust enrichment if he received from the other that which it was agreed between them that the other should give in return." (citing 17 CJS Contract § 6, 570-574)). *Schroeder v. Buchholz*, 622 N.W.2d 202, 207 (N.D. 2001) (including "[a]n absence of a remedy provided by law" as an essential element of unjust enrichment); *Apache Corp. v. MDU Res. Group, Inc.*, 603 N.W.2d 891, 894-95 (N.D. 1999) (same).	
Ohio *Ohio Consumer Sales Pratices Act* Ohio Rev. Code	Private right of action allowed. Must be a "consumer" -a person who engages in a consumer transaction with a supplier.	Class actions allowed. Class actions not allowed for claims based upon Attorney	**Two years from the occurrence** or one year after the government enforcement action, whichever	Plaintiff must have suffered some damages or engaged in a transaction to be rescinded.		Deceptive act or practice need only be "in connection with" a consumer transaction.	**Materiality required** .No supplier shall commit an unfair or deceptive act or practice in connection with a consumer transaction. Such an unfair or deceptive act or	"Intent to deceive is not an element required for a violation of the deceptive practices portion of the act."	In an individual action, actual damages or rescission; statutory damages available. If the defendant has a pattern of violation, a		Transaction must involve goods or services for "primarily personal, family, or household" use.

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Ann.§§ 1345.01, *et seq.*	"Consumer transaction" means a sale of primarily personal, family, or household goods.	General's opinion or court decision and not express violation of Act.	is later. No discovery rule for suits seeking damages.	Remedies of cancellation of contract and statutory damages do not require actual damages.			practice by a supplier violates this section whether it occurs before, during, or after the transaction. In construing division (A) of this section, the court shall give due consideration and great weight to federal trade commission orders, trade regulation rules and guides, and the federal courts' interpretation of subsection 45(a)(1) of the "Federal Trade Commission Act."		consumer may recover treble damages. Discretionary attorney's fees to prevailing party if action brought in bad faith or the act committed knowingly.		Practices not expressly listed in the Act may become actionable upon a ruling by the state Attorney General or decision by state court, but no class actions are allowed for these claims. Defense If defendant furnished similar merchandise of equal or greater value as a good faith substitute for a previous representation.
	Ohio Rev. Code Ann. §§1345.01(A), (D), 1345.09	Ohio Rev. Code Ann. §1345.09(B)	Ohio Rev. Code Ann. §1345.10(c)	Ohio Rev. Code Ann. §1345.09(A)		Ohio Rev. Code Ann. §1345.02(A)	Ohio Rev. Stat. Ann §§ 1345.02(A), (C)		Ohio Rev. Code Ann. §§1345.09(A), (B), (F)		Ohio Rev. Code Ann. §§1345.01(A), 1345.09(B),1345.02(B)(5)
	Parker v. I&F Insulation Co., 730 N.E.2d 972, 978-79 (Ohio 2000).		*Weaver v. Armando's Inc.*, No. 02-153, 2003Ohio App. LEXIS 4273, at*16 (Ohio Ct. App. Sept.3, 2003).	*New Phila., Inc. v. Sagrilla*, No. 01-04-0033,2002 WL 1467771, at *5 (Ohio Ct. App. June 26,2002).				*Rose v. Zaring Homes, Inc.*, 702 N.E.2d 952, 956 (Ohio Ct. App. 1997).	*Perkins v. Stapleton Buick- GMC Truck, Inc., No. 2001-10*,2001 Ohio App. Lexis 2651, at*11-12 (Ohio Ct. App. June 15,2001).		
Oklahoma *Consumer Protection Act* Okla. Stat. Ann. tit. 15, §§ 751, *et seq.*	Private right of action allowed.	Class actions allowed.	**Three years for damages claims**, one year for penal claims.		Deceptive trade practice is a misrepresentation or omission that "could reasonably be expected to deceive or mislead a person" to that person's detriment.	The challenged practice must have caused the plaintiff's injuries.	Misrepresentation or omission must "have the capacity to deceive the customer."	Whether knowledge is required depends upon the particular provision alleged to have been violated.	Actual damages and reasonable attorney's fees; up to $10,000 in costs if the other party asserts a claim or defense in bad faith. For individual actions only, if the unlawful acts are "unconscionable," discretionary award up to$2,000 per act.		Unlawful conduct need not implicate a public interest to be actionable. Court may award attorney's fees to non- prevailing party for bad faith or frivolous claims.
	Okla. Stat. Ann. tit. 15,§§ 761.1(A), (B)	Okla. Stat. Ann. tit. 15,§§ 761.1(A), (B)			Okla. Stat. Ann. tit. 15, §752(13)	Okla. Stat. Ann. tit. 15, §§753, 761.1(A)		Okla. Stat. Ann. tit. 15,§§ 752(13), (14); *but see* Okla. Stat. Ann. tit. 15, §§ 753(2)-(5); tit.78, § 53(3) (requiring knowledge of a false representation).	Okla. Stat. Ann. tit. 15, §§761.1(A), (B)		Okla. Stat. Ann. tit. 15, §761.1(A)
	Patterson v. Beall, 19P.3d 839, 846 (Okla.2000).	*Patterson v. Beall*, 19P.3d 839, 846 (Okla.2000).	*Brashears v. Sight 'NSound Appliance Ctrs.*,981 P.2d 1270, 1273-79 (Okla. 1999).		*Patterson v. Beall*, 19P.3d 839, 847 n.12 (Okla.2000).	*Patterson v. Beall*, 19 P.3d839, 846-47 (Okla. 2000).	*Patterson v. Beall*, 19 P.3d 839, 847 n.12 (Okla. 2000).	*Patterson v. Beall*, 19P.3d 839, 847 n.12 (2000).			*Patterson v. Beall*, 19 P.3d839, 847 (Okla. 2000).
Oregon *Unlawful Trade Practices Act*	Private right of action. Applies to goods obtained primarily for	Class actions allowed.	**One year from discovery of the deceptive practice.**	Must suffer "ascertainable loss of money or property" to recover		Ascertainable loss must be "**as a result of willful use or employment**" of	**Materiality required.** A person engages in an unlawful practice when in the course of the person's	While scienter is not required to establish violation of the UTPA,	In individual actions, greater of actual damages or $200; reasonable attorney's	**Unjust enrichment is unavailable if plaintiff has received the benefit of its**	Upon commencement of action, plaintiff must mail copy of the

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("UTPA") Or. Rev. Stat. §§646.605, *et seq.*	personal, family, or household purposes.			"actual damages. "Plaintiff is required to plead and prove some actual injury.		unlawful "methods, acts or practices. "**Plaintiff must have "relied in fact" on certain misrepresentations**. Reliance not necessary for omissions.	business, vocation or occupation the person does any of the following: Concurrent with tender or delivery of any real estate, goods or services fails to disclose any known material defect or material nonconformity.	plaintiff must prove "willful use or employment" of unlawful practice in order to recover damages. However, "willful violation" means only that the actor should have known the act was unlawful.	fees may be awarded to the prevailing party. Discretionary punitive damages are awardable only when jury finds deterrence is necessary and deception is aggravated. Attorney's fees are available in class actions. Statutory damages may be recover on behalf of class members only if "ascertainable loss" results from reckless or knowing acts.	**bargain**.	complaint to state Attorney General. Trade practice must have a sufficient nexus in Oregon to give rise to a claim.
	Or. Rev. Stat. §§646.638(1), (8),646.605(6)(a)	Or. Rev. Stat. §§646.605(6)(a)	Or. Rev. Stat. §646.638(6)	Or. Rev. Stat. §646.638(1)		Or. Rev. Stat. § 646.638(1)	Or. Rev. Stat. § 646.608(t)	Or. Rev. Stat. §§646.605(10); 646.638(1)	Or. Rev. Stat. §§ 646.638(1), (3), (4), (8)(a)		Or. Rev. Stat. § 646.638(2)
	Weigel v. Ron Tonkin Chevrolet Co., 690 P.2d488, 492-93 (1984).			*Creditors Protective Ass'n v. Britt*, 648 P.2d414, 416 (Or. Ct. App.1982).		*Sanders v. Francis*, 561P.2d 1003, 1006 (Or. 1977); *Feitler v. Animation Celection, Inc.*, 13 P.3d1044, 1050 (Or. Ct. App.2000).		*Raudebaugh v. Action Pest Control, Inc.*, 650P.2d 1006, 1009 (Or. Ct. App. 1982).	*Crooks v. Payless Drug Stores*,592 P.2d 196, 199 (1979).	*High v. Davis*, 584 P.2d 725, 736 (Or. 1978) (en banc) ("We … do not believe that the claimants will be unjustly enriched. They are receiving what they bargained and paid for."); *Winters v. County of Clatsop*, 150 P.3d 1104, 1108 (Or. Ct. App. 2007) ("[W]e agree with the [defendant] that plaintiff has not carried her burden . . . Under the circumstances, it is not unjust to deny restitution and to honor the terms of the bargain. . . that [plaintiff] accepted.").	*Julian-Ocampo v. Air Ambulance Network, Inc., No.* 00-1262, 2001 U. S. Dist. Lexis 22173, at *7-8 (D.Or. 2001).
Pennsylvania *Unfair Competition Acts or Practices* 73 Pa. Cons. Stat. §§201-1, *et seq.*	Private right of action allowed.	Class actions allowed.	**Six years.**	Must suffer "ascertainable loss of money or property" to recover "actual damages. "		**Plaintiff must show "justified reliance" for common-law fraud. Causal connection between unlawful practices and damages required**.	Plaintiff **must show materiality** for common-law fraud-based deceptive acts and practices.	Plaintiff must show elements of common- law fraud, including knowledge of fraud or reckless disregard thereto.	Actual damages or $100, whichever is greater; discretionary treble damages and reasonable attorney's fees. Discretionary punitive damages are recoverable. Discretionary attorney's fees are recoverable.	SOL for unjust enrichment claims is 4 years	Act restricted to those goods and services purchased or leased "primarily for personal, family or household purposes. "No right to jury trial.
	73 Pa. Cons. Stat. § 201-9.2	73 Pa. Cons. Stat. § 201-9.2		73 Pa. Cons. Stat. § 201-9.2(a)		73 Pa. Cons. Stat. § 201-9.2(a)			73 Pa. Cons. Stat. § 201-9.2(a)		73 Pa. Cons. Stat. § 201-9.2(a)
	Agliori v. Met. Life	*Agliori v. Met.*	*Drelles v. Mfrs.*	*Weinberg v. Sun*		*Weinberg v. Sun*	*Debbs v. Chrysler Corp.*, 810	*Debbs v. Chrysler*	*Arsonson v.*		*Greiner v. Erie Ins.*

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	Ins. Co., 879 A.2d 315, 319 (2005).	*Life Ins. Co.*, 879 A.2d 315, 319 (2005).	*Life Ins. Co.*, 881 A.2d 822, 831 (2005).	*Co., Inc.*, 777 A.2d 442, 446 (Pa. 2001).		*Co., Inc.*, 777 A.2d 442, 446 (2001); *Toy v. Metro. Life Ins., Co.*, 863 A.2d 1, 11 (Pa. Super. Ct. 2004).	A.2d137, 155 (Pa. Super. Ct. 2002); *Zwiercan v. General Motors Corp.*, No. 3235, 2003 WL 1848571, at *1-2 (Pa. Ct. Com. Pl. Mar. 18, 2003).	*Corp.*,810 A.2d 137, 155 (Pa. Super. Ct. 2002).	*Creditrust Corp.*, 7F. Supp. 2d 589, 594 (W.D. Pa.1998); *In re Bryant*, 111 B.R.474, 480 (E.D. Pa. 1990) (unfair conduct breaching parties' contract justified attorney's fees).		*Exch.*, No. 3053, 2000 WL33711041, at *7 (Pa. Ct. Com. Pl. Nov. 13, 2000).
Rhode Island *Unfair Trade Practices& Consumer Protection Act* R.I. Gen. Laws §§ 6-13.1-1, *et seq.*	Private right of action allowed.	Class actions allowed. Class certification governed by special rules.	**Ten years.**	Must suffer "ascertainable loss of money or property" to recover "actual damages."		Ascertainable loss must be "as a result of the use or employment . . . of a method, act or practice declared unlawful."	Covers **material misrepresentations.**	Undecided.	**Actual damages or $200, whichever is greater; discretionary punitive damages and reasonable attorney's fees.** Must show malice, bad faith, or intent to harm for punitive damages.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	Limited to purchases or leases of goods or services for personal, family, or household purposes. Business entities have no private right of action.
	R.I. Gen. Laws §§ 6-13.1-5.2(a), (b)	R.I. Gen. Laws §§ 6-13.1-5.2(a), (b)	R.I. Gen. Laws § 9-1-13	R.I. Gen. Laws § 6-13.1-5.2(a)		R.I. Gen. Laws § 6-13.1-5.2(a)			R.I. Gen. Laws §§ 6-13.1-5.2(a), (d)		R.I. Gen. Laws § 6-13.1-5.2(a)
	Park v. Ford Motor Co.,844 A.2d 687, 693 (R.I.2004).	*Park v. Ford Motor Co.*,844 A.2d 687, 691-92 (R.I. 2004).					*Groff v. Am. Online, Inc.*, No. 97-0331, 1998 WL 307001, at *5 (R.I. Super. Ct. May 27, 1998).		*Ross-Simons of Warwick, Inc. v. Baccarat, Inc.*, 182 F.R.D.386, 400 (D.R.I. 1998); *Park v. Ford Motor Co.*, 844 A.2d 687,691-92 (R.I. 2004).	*Rosetta v. Moretti*, No. 98-89, 2005 WL 1109638, at *8 (R.I. Super. May 4, 2005) (granting motion for judgment as matter of law in favor of defendant because plaintiffs failed to establish that allowing defendant to retain the negotiated purchase price would be inequitable).	*Scully Signal Co. v. Joyal*,881 F. Supp. 727, 741, 745 (D.R.I. 1995); *ERI Max Entm't Inc., v. Streisand*,690 A.2d 1351, 1354 (R.I.1997).
South Carolina *Unfair Trade Practices Act* S.C. Code Ann. §§ 39-5-10, *et seq.*	Private right of action allowed.	Class actions not allowed.	**Three years after discovery of conduct.**	Requires "ascertainable loss of money or property."		Ascertainable loss must be "as a result of the use or employment . . . of an unfair or deceptive method, act or practice."	Must be a **material misrepresentation of fact.**	Violation need not be knowing or willful to recover actual damages; must be willful for treble damages.	Actual damages; discretionary treble damages for willful or knowing violations. **Punitive damages are not permitted**. Attorney's fees awarded to prevailing plaintiff, reasonably determined by six enumerated factors.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain**.	An adverse effect on public interest must be proven by "specific facts."
	S.C. Code Ann. § 39-5-140(a)	S.C. Code Ann. § 39-5-140(a)	S.C. Code Ann. § 39-5-150	S.C. Code Ann. § 39-5-140(a)		S.C. Code Ann. § 39-5-140(a)			S.C. Code Ann. § 39-5-140(a)		
			Prestwick Golf Club, Inc. v. Prestwick Ltd. P'ship, 503 S.E.2d 184, 188 (S.C. Ct. App. 1998).	*Omni Outdoor Adver., Inc. v. Columbia Outdoor Adver., Inc.*, 974 F.2d502, 507 (4th Cir. 1992).		*Inman v. Ken Hyatt Chrysler Plymouth, Inc.*,363 S.E.2d 691, 692 (S.C.1988) (requiring "capacity to deceive").	*Clarkson v. Orkin Exterminating Co.*, 761 F.2d 189, 191 (4th Cir. 1985) (puffing not misrepresentation); *Wingard v. Exxon Co., USA*, 819 F. Supp. 497, 506 (D.S.C. 1992).	*Haley Nursery Co. v. Forrest*, 381 S.E.2d 906,909 (S.C. 1989); *Inman v. Ken Hyatt Chrysler Plymouth, Inc.*, 363S.E.2d 691, 692 (S.C.1988) (noting that intent to	*Tousley v. N. Am. Van Lines, Inc.*, 752 F.2d 96, 104-05 (4th Cir. 1985) (reversing lower court's award of punitive damages); *Rowel v. Whisnant*, 600 S.E.2d 96, 99 (S.C. Ct. App. 2004); *Payne v. Holiday Towers, Inc.*, 321S.E.2d	*Johnston v. Brown*, 348 S.E.2d 391, 395 (S.C. Ct. App. 1986) (holding plaintiff cannot recover under unjust enrichment where he received the agreed to consideration for the benefit conferred),	*Singleton v. Stokes Motors, Inc.*, 595 S.E.2d461, 466 (S.C. 2004);*Jeffries v. Phillips*, 451S.E.2d 21, 23 (S.C. Ct. App.1994).

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								deceive is not required).	461, 466 (S.C. Ct. App.1984).	*rev'd on other grounds*, 357 S.E.2d 450 (S.C. 1987).	
South Dakota *Deceptive Trade Practices and Consumer Protection Act* S.D. Codified Laws §§37-24-1 et *seq.*	Private right of action allowed.	Class actions allowed.	**Four years after occurrence or discovery of conduct.**	Plaintiff must claim to be "adversely affected" by an unlawful act or practice and have "actual damages."		Requires "proof of an intentional misrepresentation or concealment of a fact on which plaintiff relied and that caused an injury to the plaintiff."	**Materiality required**. It is a deceptive act to practice for any person to: Knowingly and intentionally act, use, or employ any deceptive act or practice, fraud, false pretense, false promises or misrepresentation or to conceal, suppress, or **omit any material fact** in connection with the sale or advertisement of any merchandise, regardless of whether any person has in fact been misled, deceived, or damaged thereby.	**A deceptive act/omission must be knowing and intentional.**	**Actual damages only; no punitive damages**. Actual damages are synonymous with compensatory damages.	Unjust enrichment is unavailable if defendant has provided consideration for benefit received.	None found.
	S.D. Codified Laws § 37-24-31	S.D. Codified Laws § 37-24-31	S.D. Codified Laws § 37-24-33	S.D. Codified Laws § 37-24-31			S.D. Codified Laws § 37-24-6(1)	S.D. Codified Laws § 37-24-6(1)	S.D. Codified Laws § 37-24-31		
	Wyman v. Terry Schulte Chevrolet, Inc., 584N.W.2d 103, 105 (S.D.1998).					*Northwestern Pub. Serv. v. Union Carbide Corp.*, 236 F. Supp. 2d 966, 973-74 (D.S.D. 2002).			*Wyman v. Terry Schulte Chevrolet, Inc.*, 584 N.W.2d103, 107 (S.D. 1998).	*Parker v. W. Dakota Insurors, Inc.*, 605 N.W.2d 181, 187 (S.D. 2000) (plaintiff cannot recover under unjust enrichment where defendant already paid consideration for the benefit conferred).	
Tennessee *Consumer Protection Act* Tenn. Code Ann. §§ 47-18-101, *et seq.*	Private right of action. Plaintiff must have purchased goods for individual, personal, family or household purpose.	Class actions not allowed.	One year after discovery of deceptive act but not more than five years after conduct.	Requires "ascertainable loss of money or property."		Requires an "ascertainable loss . . . as a result of the use or employment . . . of an unfair or deceptive act or practice." No reliance requirement, but plaintiffs must show proximate cause of harm.	Undecided.	Unfair or deceptive act "need not be willful or knowingly made to recover actual damages;" statute contemplates recovery for negligence. Willful and knowing acts are required for treble damages.	Actual damages and attorney's fees; discretionary treble damages for "willful and knowing violation." **Punitive damages not available.**	Unjust enrichment is unavailable if defendant has provided consideration for benefit received. Unjust enrichment claims require that plaintiff lacks a legal remedy.	Damages can be limited to settlement offer. Defendants may recoup attorney's fees and costs from plaintiffs who bring frivolous actions.
	Tenn. Code Ann. §§ 47-18-103, 47-18-109(a)(1)	Tenn. Code Ann. § 47-18-109(a)(1)	Tenn. Code Ann. § 47-18-110	Tenn. Code Ann. § 47-18-109(a)(1)		Tenn. Code Ann. § 47-18-109(a)(1)			Tenn. Code Ann. §§ 47-18-109(a)(1), (3)		Tenn. Code Ann. §§ 47-18-109(c)(4), 47-18-109(e)(2)
	Walker v. Sunrise Pontiac-GMC Truck, Inc.,249 S.W.3d 301, 308-11 (Tenn. 2008).					*Harvey v. Ford Motor Credit Co.*, No. 03A01-9807- CV-00235, 1999 WL486894, at *2 (Tenn. Ct. App. July 13, 1999) (proximate cause required).		*Smith v. Scott Lewis Chevrolet, Inc.*, 843S.W.2d 9, 12-13 (Tenn. Ct. App. 1992).	*Smith v. Scott Lewis Chevrolet, Inc.*, 843 S.W.2d 9,12 (Tenn. Ct. App. 1992); *Paty v. Herb Adcox Chevrolet Co.*, 756 S.W.2d 697, 699 (Tenn. Ct. App. 1988).	*Paschall's, Inc. v. Dozier*, 407 S.W.2d 150, 155 (Tenn. 1966); *McKee v. Meltech, Inc.*, No. 10-2730, 2011 WL 1770461, at *10 (W.D. Tenn. May 9, 2011) (rejecting unjust enrichment claim where defendant "has already given	

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										consideration for any benefit that [plaintiff]'s services provided"); *Weather Doctor Servs. Co., Inc. v. Stephens*, No. E2000-1427-COA-R3-CV, 2001 WL 849540, at *2-3 (Tenn. Ct. App. July 27, 2001). *Freeman Indus. LLC v. Eastman Chem. Co.*, 172 S.W.3d 512, 525-26 (Tenn. 2005).	
Texas *Deceptive Trade Practices Act* Tex. Bus. & Com. Code§§ 17.41, *et seq.*	Private right of action allowed.	Class actions allowed.	**Two years after occurrence or discovery by reasonable diligence.**	Must cause "economic damages or damages for mental anguish."		Act or practice must be a "producing cause" of damages and "relied on by a consumer to the consumer's detriment."	The misrepresentation must be of a material fact.	Knowledge or intent is not an element unless required by a particular provision. To recover treble damages, defendant's actions must have been intentional.	**Actual damages**, mental anguish (if intentional); and reasonable and necessary attorney's fees. Punitive damages of not more than three times actual damages are available for intentional acts.	Requires; 1) valuable services were rendered or materials furnished; 2) for the person sought to be charged; 3) which services and materials were accepted by the person sought to be charged, used and enjoyed by him; 4) under such circumstances as reasonably notified the person sought to be charged that the plaintiff in performing such services was expecting to be paid by the person sought to be charged.	**Presuit notice letter by certified mail**, including specific allegations and all damages sought, required at least 60 days before the complaint is filed. Defendants may recoup attorney's fees and costs from plaintiffs who bring a bad-faith or harassment action.
	Tex. Bus. & Com. Code §17.50	Tex. Bus. & Com. Code §17.50	Tex. Bus. & Com. Code §17.565	Tex. Bus. & Com. Code §17.50(a)		Tex. Bus. & Com. Code §17.50(a)	Tex. Bus. & Com. Code § 17.46(b)(24)	Tex. Bus. & Com. Code §17.50(b)	Tex. Bus. & Com. Code §§17.50(b), (d)		Tex. Bus. & Com. Code §§17.50, 17.50(c)
	Mahoney v. Cupp, 638 S.W.2d 257, 261 (Tex. Ct. App. 1982).		*McAdams v. Cap. Prods. Corp.*, 810 S.W.2d 290,292-93 (Tex. Ct. App.1991).				*Church & Dwight Co. v. Huey*, 961S.W.2d 560, 567 (Tex. Ct. App. 1997).	*Smith v. Herco, Inc.*, 900S.W.2d 852, 859 (Tex. Ct. App. 1995).	*Gunn Infiniti, Inc. v. O'Byrne,996 S.W.2d 854, 860-61 (Tex.1999); Houston Livestock Show v. Hamrick*, 125 S.W.3d555, 584 (Tex. Ct. App. 2003).	*Bashara v. Baptist Mem'l Hosp. Sys.*, 685 S.W.2d 307, 310 (Tex. 1985)	
Utah *Consumer Sales Practice Act* Utah Code Ann. §§ 13-11-1, *et seq.*	Private right of action allowed.	Act contains specific class action requirements.	**Two years.**	Requires that plaintiff suffer a "loss. "Loss" should be construed more broadly than "damages."		Requires a plaintiff suffer loss as a result of violations of the Act.	**Materiality of fact required.** The purpose of the act is "to make state regulation of consumer practices not inconsistent with the policies of the Federal Trade Commission Act relating to consumer protection. "The FTC requires that the	**Requires knowing or intentionally deceptive act or practice.**	**In individual actions, greater of actual damages or $2,000; reasonable attorney's fees.** In class actions, equitable relief ONLY unless specific actions of defendant previously declared unlawful by court or other authority.	**Unjust enrichment is unavailable if plaintiff has received the benefit of its bargain.** Unjust enrichment claims require that plaintiff lacks a legal remedy.	Bona fide error defense limits remedy to amount defendant was unjustly enriched. Good faith is an affirmative defense.

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							representation, omission, or practice is material.				
	Utah Code Ann. § 13-11-19	Utah Code Ann. §§ 13-11-19(4), 13-11-20	Utah Code Ann. § 13-11-19(8)	Utah Code Ann. § 13-11-19(2)		Utah Code Ann. § 13-11-19(2)	Utah Code Ann. § 13-11-2	Utah Code Ann. § 13-11-4(2)	Utah Code Ann. §§ 13-11-19(2), (4), (5)		Utah Code Ann. §§ 13-11-2(6), 13-11-19(4)(c), (5)
				Andreason v. Felsted,137 P.3d 1, 4 (Utah Ct. App. 2006).				*Rawson v. Conover*, 20 P.3d 876, 883 (Utah 2001).		*S. Title Guar. Co., Inc. v. Bethers*, 761 P.2d 951, 955 (Utah Ct. App. 1988); *Bray Lines Inc. v. Utah Carriers, Inc.*, 739 P.2d 1115, 1117 (Utah Ct. App. 1987) (holding unjust enrichment does not occur when a party receives the benefit of its bargain). *Mann v. Am. W. Life Ins. Co.*, 586 P.2d 461, 465 (Utah 1978); *Ockey v. Lehmer*, 189 P.3d 51, 61 n.42 (Utah 2008); *Am. Towers Owners Ass'n, Inc. v. CCI Mech., Inc.*, 930 P.2d 1182, 1193 (Utah 1996) ("The doctrine is designed to provide an equitable remedy where one does not exist at law."), *abrogated on other grounds by Davencourt at Pilgrims Landing Homeowners Ass'n v. Davencourt at Pilgrims Landing, LC*, 221 P.3d 234 (Utah 2009); *Nickerson Co. v. Energy W. Mining Co.*, No. 20090221–CA, 2009 WL 4681778, at *2 (Utah Ct. App. Dec. 10, 2009) (barring recovery on an unjust enrichment theory	*Sampson v. Richins*, 770P.2d 998, 1005 (Utah Ct. App. 1989).

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										where there is an express contract).	
Vermont *Consumer Fraud Act* Vt. Stat. Ann. tit. 9, §§2451, *et seq.*	Private right of action allowed.	Class actions allowed.	**Six years.**	Suit can be brought by "[a]ny consumer who contracts for goods or services in reliance upon false or fraudulent representations . . . or who sustains damages or injury as a result of any false or fraudulent representations."		Cause of action available to consumer who contracts for goods or services in reliance upon false or fraudulent representations or who sustains damages or injury as a result of such representations. Actual reliance is not required; a statement need only be capable of misleading the consumer.	The **misleading effects must be materia/** measured by an objective standard, that is, likely to affect a reasonable consumer's conduct or decision with regard to a product.	No intent or bad faith required. If defendant knows or should know that omission is important, materiality is presumed.	Actual damages, reasonable attorney's fees, exemplary damages not to exceed three times actual damages.	Unjust enrichment is unavailable if defendant has provided consideration for benefit received.	No derivative liability absent direct participation in the unfair or deceptive acts, direct aid to the actor, or a principal/agent relationship.
	Vt. Stat. Ann. tit. 9, §2461(b)	Vt. Stat. Ann. tit. 9, §2461(b)	Vt. Stat. Ann. tit. 12, §511	Vt. Stat. Ann. tit. 9, §2461(b)		Vt. Stat. Ann. tit. 9, §2461(b)			Vt. Stat. Ann. tit. 9, § 2461(b)		
	Vermont Mobile Home Owners' Ass'n, Inc. v. Lapierre, 94 F. Supp. 2d519, 520 (D. Vt. 2000).	*Vermont Mobile Home Owners' Ass'n, Inc. v. Lapierre*, 94 F. Supp. 2d519, 520 (D. Vt. 2000).				*Jordan v. Nissan N. Am.*, 853 A.2d 40, 44 (Vt. 2004).	*Carter v. Gugliuzzi*, 716 A.2d 17, 23 (Vt. 1998).	*Carter v. Gugliuzzi*, 716A.2d 17, 23-24 (Vt.1998); *Winston v. Johnson & Dix Fuel*, 515A.2d 371, 376 (Vt. 1986);*Poulin v. Ford Motor Co.*,513 A.2d 1168, 1171 (Vt.1986).	*Gramatan Home Investors Corp. v. Starling*, 470 A.2d 1157, 1161-62 (Vt. 1983).	*Ray Reilly's Tire Mart, Inc. v. F.P. Elnicki, Inc.*, 537 A.2d 994, 995 (Vt. 1987) ("[I]f the [defendant] has given any consideration to any person for the [benefit], it would not be unjust for him to retain the benefit without paying the furnisher." (quoting *Paschall's v. Dozier*, 407 S.W.2d 150, 155 (Tenn. 1966))); *Will v. Mill Condo. Owners' Ass'n, Inc.*, No. 457-10-01 WRCV, 2002 WL 34340312 (Vt. Sup. Ct. July 5, 2002).	*State v. Stedman*, 547 A.2d1333, 1335-36 (Vt. 1988).
Virginia *Consumer Protection Act* Va. Code Ann. §§ 59.1-196 *et seq.*	Private right of action.	Class actions generally not allowed.	**Two years**. Right of action runs from the date of injury and not from the date of discovery unless the claim is solely equitable.	Actual loss required to initiate action.		Requires loss as the result of a violation of the Act. **Reliance is necessary to state a claim.**	A false misrepresentation must be of an existing fact, not a mere expression of an opinion.	Intent requirement of fraud applies. Misrepresentation by omission of a material fact requires evidence of a knowing or deliberate decision to conceal the fact.	Provides for greater of actual damages or $500, reasonable attorney's fees, and costs; if the violation was willful, then there is discretion for the court to award discretionary treble damages or $1,000.		If a defendant tenders a cure offer, it cannot be liable for attorney's fees or costs unless actual damages exceed the cure offer. Bona fide error or lack of control is a defense; attorney's fees can be awarded nonetheless. Acceptance of cure offer forecloses further actions based on same allegations of fact.

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	Va. Code Ann. § 59.1-204(A)	Va. Code Ann. § 59.1-204(A)	Va. Code Ann. §§ 8.01-230, 59.1-204(A)			Va. Code Ann. § 59.1-204(A)		Va. Code Ann. § 59.1-200 (A)(8)	Va. Code Ann. §§ 59.1-204(A)- (C)		Va. Code Ann. §§ 59.1-204(A), (C), 59.1-207
	Almeter v. Va. Dep't of Taxation, No. LL-821-4, 2000 WL 1687589, at *1 n.1 (Va. Cir. Ct. Nov. 6, 2000).	*Almeter v. Va. Dep't of Taxation,* No. LL-821-4,2000 WL 1687589, at *1 n.1 (Va. Cir. Ct. Nov. 6,2000).		*Gavin v. Koons Buick Pontiac GMC, Inc.*, 28Fed. Appx. 220, 223 (4th Cir. 2002); *Alston v. Crown Auto, Inc.*, 224F.3d 332, 336 (4th Cir.2000).		*Alston v. Crown Auto, Inc.*,224 F.3d 332, 336 (4th Cir.2000); *Polk v. Crown Auto, Inc.*, 228 F.3d 541, 543 (4th Cir. 2000); *Cooper v. GGGR Invs., LLC*, 334 B.R. 179,188 (E.D. Va. 2005).	*Graham v. RRR, LLC*, 202 F. Supp. 2d483, 491 (E.D. Va. 2002); *Lambert v. Downtown Garage*, 553 S.E.2d 714,717 (Va. 2001).	*Cooper v. GGGR Invs., LLC*, 334 B.R. 179, 188 (E.D. Va. 2005); *Lambert v. Downtown Garage, Inc.*, 553 S.E.2d 714, 718 (2001); *Weiss v. Cassidy Dev. Corp.*, No. 206766,2003 WL 22519650, at*2 (Va. Cir. Ct. Aug. 18,2003).			
Washington *Unfair Business Practices - Consumer Protection Act* Wash. Rev. Code Ann.§§ 19.86.010, *et seq.*	Private right of action.	Class actions permitted.	**Four years.**	Allows cause of action by any person who is injured in his or her business or property by a violation of the Act.	The knowing failure to reveal something of material importance is deceptive within the Act.	A causal link must exist between the unfair or deceptive act and the injury suffered. A plaintiff establishes causation by showing that he or she relied upon a misrepresentation of fact; however, some cases hold that a plaintiff need not prove reliance to establish an unfair trade practice.	The knowing failure to reveal something of **material importance** is deceptive within the Act.	Intent not required if the action has the capacity to deceive a substantial portion of the purchasing public.	Provides for actual damages, attorneys' fees, discretionary treble damages not to exceed$25,000.		Defense if acts or practices complained of have an adverse effect on the public interest or are reasonable in relation to the development and preservation of business.
	Wash Rev. Code Ann. §19.86.090	Wash Rev. Code Ann. §19.86.090	Wash Rev. Code Ann. §19.86.120	Wash Rev. Code Ann. §19.86.090					Wash Rev. Code Ann. §19.86.090		Wash Rev. Code Ann. §19.86.920
	Smith v. Behr Process Corp., 54 P.3d 665, 675 (Wash. Ct. App. 2002).			*Nordstrom, Inc. v. Tampourlos*, 733 P.2d 208, 210-11 (1987);*Girard v. Myers*, 694P.2d 678, 685-86 (Wash. Ct. App. 1985).	*Robinson v. Avis Rent-A- Car Sys. Inc.*, 22 P.3d818, 824 (Wash Ct. App.2001).	*Pickett v. Holland Am. Line- Westours, Inc.*, 35 P.3d351, 360 (2001); *Leingang v. Pierce Cty. Med. Bureau, Inc.*, 930 P.2d 288, 296 (1997); *State v. A.N.W. Seed Corp.*, 802 P.2d 1353,1355; *Wash. v. Williams Chrysler Plymouth*, 553P.2d 423, 436-37 (1976); *Robinson v. Avis Rent-A- Car Sys. Inc.*, 22 P.3d 818,823 (Wash Ct. App. 2001); *Testo v. Russ Dunmire Olds.*, 554 P.2d 349, 356-57 (Wash. Ct. App. 1976).	*Robinson v. Avis Rent-A-Car Sys. Inc.*, 22 P.3d 818, 824 (Wash Ct. App.2001); *Testo v. Russ Dunmire Olds.*, 554 P.2d 349, 356-57 (Wash. Ct. App.1976).	*Haner v. Quincy Farm Chems., Inc.*, 649 P.2d 828, 831 (1982).			*Leingang v. Pierce County Med. Bureau, Inc.*, 930 P.2d 288, 296 (1997).
West Virginia *Consumer Credit*	Private right of action.	Class actions permitted.	**Two years**. Statute of limitations begins to run when fraud	Plaintiff must suffer ascertainable loss of money in order to	Deceptive acts prohibited whether or not	**Ascertainable loss must have been suffered as a result**	In false advertising claims, the offending **misrepresentation must be**	In false advertising claims, the offending	Greater of actual damages or$200. Punitive damages and		Act should not be construed to prohibit acts or practices that

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and Protection Act W. Va. Code Ann. §§46A-1-101, *et seq.*			discovered or should have been discovered by reasonable diligence.	bring a claim. A consumer is not required to list specific amount of actual damages.	any person has in fact been misled, deceived or damaged thereby.	**of a prohibited act. Reliance on affirmative misrepresentation s must be proven in certain instances.**	**a material fact.** Prohibited omissions must be made with intent to deceive.	misrepresentation must be made with the intent that others rely on it.	attorneys' fees not allowed.		are reasonable in relation to the development and preservation of business. Must notify defendant of alleged violation and provide 20 days for cure offer in certain instances.
	W. Va. Code Ann. § 46A-6-106(a)	W. Va. Code Ann. § 46A-6-106(a)	W. Va. Code Ann. § 55-2-12	W. Va. Code Ann. § 46A-6-106(a)	W. Va. Code Ann. §§ 46A-6-102(7)(M), 46A-6-106(a)	W. Va. Code Ann. §§ 46A-6-102(7)(M), 46A-6-106(a)	W. Va. Code Ann. § 46A-6-102(7)(M)	W. Va. Code Ann. § 46A-6-102(7)(M)	W. Va. Code Ann. § 46A-6-106(a)		W. Va. Code Ann. §§ 46A-6-101(2), 46A-6-106(b)
	In re W. Va. Rezulin Litig., 585 S.E.2d 52, 74 (2003).		*Brumbaugh v. Princeton Partners*, 985 F.2d 157,161-62 (4th Cir. 1993).	*In re W. Va. Rezulin Litig.*, 585 S.E.2d 52, 75 (2003).	*White v. Wyeth*, 705S.E.2d 828, 837 (2010).	*White v. Wyeth*, 705 S.E.2d 828, 837 (2010).			*Virden v. Altria Group, Inc.*,304 F.Supp. 2d 832, 850 (N.D. W. Va. 2004).		
Wisconsin *Deceptive Trade Practices Act* Wis. Stat. § 100.18	Private right of action.	Class actions permitted.	**Three years**. Discovery rule does not apply.	A plaintiff must have suffered a pecuniary loss.		**Pecuniary loss must be because of a violation of Section 100.18 in order to state a claim. Must show a causal connection between the alleged conduct and any pecuniary loss suffered. Individual reliance required.**	Representation must be untrue, deceptive, or misleading. Puffery is not actionable. **Material omissions are not actionable.**	**Representation must be made with knowledge that the representation was false**. There is strict liability for misrepresentations. Plaintiffs must show that the defendant's intentionally induced the public to buy the merchandise.	Allows only actual damages, costs and attorneys' fees. Discretionary doubling of pecuniary damages. Punitive damages are recoverable but plaintiff cannot get duplicative recovery.	Unjust enrichment is unavailable if defendant has provided consideration for benefit received.	Good faith may be an affirmative defense. Discovery rule does not apply to toll the statute of limitations.
	Wis. Stat. §100.18(11)(b)(2)	Wis. Stat. §100.18(11)(b)(2)	Wis. Stat. §100.18(11)(b)(3)	Wis. Stat. §100.18(11)(b)(2)		Wis. Stat. §100.18(11)(b)(2)			Wis. Stat. §§ 100.18(11)(b)(2),100.20(5)		
	Tietsworth v. Harley- Davidson, Inc., 661N.W.2d 450, 452 (Wis. Ct. App. 2003).		*Skrupky v. Elbert*, 526N.W.2d 264, 273-74 (Wis. Ct. App. 1994).	*Reusch v. Roob*, 610N.W.2d 168, 176 (Wis. Ct. App. 2000).		*Valente v. Sofamor, S.N.C.*,48 F. Supp. 2d 862, 874 (E.D. Wis. 1999); *State v. Satermus*, 361 N.W.2d 728,731 (Wis. Ct. App. 1984).	*State v. Am. TV & Appliance of Madison, Inc.*, 430 N.W.2d 709, 712 (1988).	*Shephard Invs. Int'l, Inc. v. Verizon Commc'ns., Inc.*, 373 F. Supp. 2d 853, 872 (E.D. Wis.2005); *Valente v. Sofamor, S.N.C.*, 48 F. Supp. 2d 862, 874 (E.D. Wis. 1999).	*Sydney v. Badgerland Mobile Homes, Inc.*, 659 N.W.2d 887,894-95 (Wis. Ct. App. 2003);*Seay v. Gardner*, 541 N.W.2d837, 839 (Wis. Ct. App. 1995).	*Tri-State Mech., Inc. v. Northland Coll.*, 681 N.W.2d 302, 305-06 (Wis. Ct. App. 2004) (denying unjust enrichment claim where defendant "has fully paid for the benefits it received")	*Am. Fed. of State v. Brown County*, 432 N.W.2d 571,574-75 (1988); Skrupky v. Elbert, 526 N.W.2d 264,273-74 (Wis. Ct. App.1994).
Wyoming *Consumer Protection Law* Wyo. Stat. Ann. §§ 40-12-101 *et seq.*	Private right of action. Cause of action only for uncured unlawful deceptive trade practices. An uncured practice is one that remains unresolved after the consumer	Class actions permitted.	Written notice of the alleged violation must be given to defendant within one year of discovery or two years of occurrence, whichever is first.	Plaintiff may only bring claims for damages she has actually suffered.		Damages must be suffered by a consumer as a result of unlawful deceptive trade practices.	**Materiality** of fact required.	**Requires that defendant knowingly engage in unfair or deceptive trade practices.**	Provides for actual damages and reasonable attorneys' fees (attorneys' fees in class action only if actual damages found and awarded); any monies recovered in a		**Prefiling demand notice requesting cure required within a year of discovery or two years following the transaction, whichever is**

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	provides statutory notice to the alleged violator.								class action which cannot be distributed to consumers within one year after final judgment shall be returned to the defendants.		**earlier.**
	Wyo. Stat. Ann. §§ 40-12-102(a)(ix), 40-12-108, 40-12-108(a), 40-12-109	Wyo. Stat. Ann. §§ 40-12-102(a)(ix), 40-12-108, 40-12-108(a), 40-12-109	Wyo. Stat. Ann. § 40-12-109	Wyo. Stat. Ann. § 40-12-108(a)		Wyo. Stat. Ann. § 40-12-108(a)		Wyo. Stat. Ann. § 40-12-105(a)	Wyo. Stat. Ann. § 40-12-108(b)		Wyo. Stat. Ann. §§ 40-12-102(a)(ix), 40-12-108(a), 40-12-109
							Big-O Tires v. Santini, 838 P.2d 1169, 1177 (1992).				

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Alt Declaration

Exhibit 5

Redacted Due to Confidential Designation

Alt Declaration

Exhibit 6

Redacted Due to Confidential Designation

Alt Declaration

Exhibit 7

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Alt Declaration

Exhibit 8

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Exhibit 9

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Exhibit 10

Redacted Due to Confidential Designation

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Exhibit 11

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